

# Executive Summary

## Introduction

The *Gilpin County Health Status Report* is a report on the community health status of Gilpin County residents. The report examines a wide range of social, demographic, and health indicators including leading causes of death, maternal, child, and adolescent health, tobacco and substance abuse, overweight and obesity, injury and violence, and immunizations. Some categories of data are considered primary indicators of community health (e.g. -- maternal and child health, leading causes of death) and other data are less common but still interesting indicators (e.g. -- substance abuse, injury, and violence).

The *Gilpin County Health Status Report* is modeled to track the objectives highlighted in the *Healthy People 2010 Leading Health Indicators*, set forth by the U.S. Department of Health and Human Services. The leading health indicators reflect major health concerns in the United States at the beginning of the 21<sup>st</sup> century. They were selected based on their ability to help motivate action and measure progress. The leading health indicators examine individual behaviors, physical and social environmental factors, and health systems' issues that affects the health of individuals and communities.

Data sources for the report include birth, mortality, hospitalization, surveillance data, and the census. Where possible, health indicators are examined by gender, race/ethnicity, age, and educational level. Trends over time were also examined for most indicators. Health indicators are compared to Colorado and the nation when possible. Additionally, indicators are compared to *Healthy People 2010* objectives where possible.

*Gilpin County Health Status Report* is a data book that provides health information on the extent which health problems affect the Gilpin County community. It is a resource for community health partners and others to use to help guide the planning and distribution of health-related resources. The data in this report also present a means by which the impact of existing public health interventions can be measured and give an indication of what interventions may still be needed.

Tracking community health indicators is an ongoing community process. The best way to assess the meaning of the data contained in this report will be for the residents of Gilpin County to engage in dialogue about the health of our community and to revisit these indicators in the future.

## Summary of Key Findings

The definition of health includes more than the absences of illness or disease. A broader definition of health includes mental, emotional, spiritual, and social well being. Identifying and reducing risk factors that can lead to negative health outcomes can improve residents' health status, increase their life spans, and elevate their overall quality of life. The Gilpin County Public and Environmental Health Services Department is committed to protecting, promoting, improving, and maintaining mental, physical, environmental, and emotional well-being. This is accomplished by organizing community efforts for the surveillance, control, and prevention of infectious disease and promoting healthy behaviors to create conditions for a healthy community. The following section summarizes key findings from the *Gilpin County Health Status Report*.

## Using the Report

Each section begins with background information on the specific health condition or disease. Most sections of the report contain a chart showing the Gilpin County rate compared to rates in the state and to *Healthy People 2010* objectives where one exists. Rates for the state were taken from the Colorado Department of Public Health and Environmental Health Information Dataset (CDPHE CoHID) or from publications produced by the various state health department division programs. National figures were obtained from National Center for Health Statistics, Centers for Disease Control and Prevention, and the U.S. Census Bureau. Where available, charts also show trends over time compared with Colorado. In some sections, charts present data broken down for Gilpin County residents by age, gender, race/ethnicity, or education level.

Because the risk of dying is determined mostly by age and because community death rates are affected by the size and age composition of the population, age-adjusted rates are used to report on death and injury. Age-adjusted rates provide a better way for making unbiased comparisons across different populations. Unadjusted or crude rates are used to report infectious diseases. For maternal and child health indicators, age-specific rates and rates based on number of live births are used. Most of the mortality trends presented in the report are based on the World Health Organization's (WHO) tenth revision of the International Classification of Disease (ICD-10) coding systems, which was introduced in 1999. Caution should be used when interpreting trend data prior to 1000 because those data are based on the ninth revision of the International Classification of Diseases (ICD-9) codes and may not be directly comparable to post 1999 data.

While it is essential to capture the health status of all racial and ethnic groups, only one group registered with statistically reliable and comparable estimates – Whites – with the exception of data presented from the U.S. Census in the demographic and social profile section.

All Gilpin County statistics are subject to small sample sizes. Due to statistical reliability and the way by which health assessment data are used, small numbers are a concern in a public health assessment.

All statistics are subject to random variation. This variation is inversely related to the number of units (or events) used to calculate a rate. In order to protect against misleading information from unreliable data, where possible, two-year and three-year average rates were used to estimate rates. Estimates based on a random sample of a population are subject to error due to sampling variability. Rates and percentages based on a full population count are also subject to random variation. The random variation may be substantial when the measure, such a rate or percentage, has a small number of events in the numerator. Typically, rates based on large numbers provide stable estimates of the true, underlying rate. Conversely, rates based on small numbers may fluctuate dramatically from year to year, or differ considerably from one small place to another small place, even when there is no meaningful difference. Meaningful analysis of differences in rates between geographic areas or over time requires that the random variation in rates be quantified; this is especially important when rates or percentages have small numerators.

Public health policy decisions are driven by fact. Often, this information is in the form of statistical data. Questions concerning health outcomes and related health behaviors and environmental factors often are studied within small subgroups of a population. Continuing improvements in the performance and availability of computing resources, including geographic information systems, and the need to better understand the relationships between environment, behavior, and consequent health effects have led to increased demand for data on small populations. These demands are often at odds with the need to preserve privacy and data confidentiality. Small numbers also raise statistical issues concerning the accuracy, and thus the usefulness, of the data.

In general, problems with confidentiality arise when there are small denominators (population size represented in a specific cell in a table); and, problems with data reliability arise when there are small numerators (cases in a specific cell in a table).

In order to protect resident confidentiality and against misleading information from inflated annual data, where possible, five-year and ten-year average rates were used as the rate throughout this report or similarly designated (e.g. less than five- or ten-year trend rates).

At the end of the report is the Data Sources and References section, which documents data sources and references and other data notations. Detailed data is also available for those interested in gaining more insight into particular health issues. You may request this information by contacting: Gilpin County Public and Environmental Health Services, Jennifer Lavelly, Director, at 303-582-5803.

## **Demographics**

- Gilpin County's population has almost doubled since 1991, the year that gaming began in Colorado.
- The age structure of Gilpin County's population has shifted since 1991. As a percentage of the total population, younger age groups (0-45) have decreased, middle-aged groups have increased (45-65), and older age groups (65+) have decreased.
- The proportion of Whites has slowly decreased since 1970 and is predicted to continue to do so while the Latino population is predicted to increase. Latinos (Hispanics) now make up 4.6% of the population and Whites (non-Hispanic) make up 92.1%.
- Families make up 67% of households in Gilpin County. The average household size is 2.32 people.
- In Gilpin County, 94% of all persons 25 years and older have a high school degree or equivalent.
- 56% of working residents are employed outside of County.
- Most Gilpin County residents 16 years or older who are employed hold professional, management, or service industry (e.g. gaming) jobs.
- 5.8% of people in Gilpin County live in poverty. This rate is lower than the U.S. and Colorado rates.
- 7.1% of children under age 18 in Gilpin County live in poverty. This rate is lower than Colorado's rate of 12.8%.
- The annual self-sufficiency income needed for a family of four in Gilpin County is \$45,009.
- The median household income in Gilpin County is \$53,910. The cost of living is \$41,851.

## **Access to Quality Health Services**

- Approximately 11.2% of Gilpin County residents are uninsured. This rate is lower than the Colorado's rate of 15.1%.
- 9.7% of children in Gilpin County do not have any type of health insurance coverage. This is substantially lower than Colorado's rate of 12.9%.
- Gilpin County is home to one federally qualified health center, which has two doctors (one M.D. and one D.O.). No other forms of primary care exist within the County.

## Leading Causes of Death

- About 24 people die each year in Gilpin County. 83% of these die from three causes: cardiovascular disease, cancer, and unintentional injuries.
- The three leading causes of death are different for males and females in Gilpin County. For males and females, the top two causes are the same – cardiovascular diseases and cancer – but for males the third leading cause is intentional injuries, whereas for females, the third leading cause of death is unintentional injuries.
- Between 2001 and 2006 in Gilpin County, 10 males died of an intentional injury, 90% of which were suicide. During the same period, 11 females died of unintentional injuries, 55% of which were transportation-related and 36% of which were poisonings.

## Physical Activity and Fitness

- It is not currently known how many Gilpin County adults engage in moderate physical activity for at least 30 minutes a day at least five times a week. Getting 30% of all adults to do so is a *Healthy People 2010* goal.
- Similarly, it is not known how many students enrolled in the Gilpin School district regularly participate in vigorous physical activity. The *Healthy People 2010* target is 85% of all students.

## Nutrition

- A key indicator of overall population health is the number of adults who eat five servings of fruits and vegetables a day. No information is available for Gilpin County adults or children.

## Overweight and Obesity

- No information is currently available for the number of adults and children in Gilpin County who are at a healthy weight, overweight, or obese. The *Healthy People 2010* target for people at a healthy weight is 60% of the population.

## Tobacco Use

- The *Healthy People 2010* target for the proportion of the population that smokes is 12% or less. No information is available for Gilpin County residents.

## Substance Use

- No information specific to Gilpin County residents exists regarding the number of high school students who report drinking alcohol or smoking marijuana and adult binge drinking. *Healthy People 2010*'s goal for the rate of adult binge drinking is 6% or less of the population.

## Mental Health

- Between 4 and 8% of Gilpin County residents may be in need of mental health services.
- No information is available regarding the number of students enrolled in the Gilpin School district reporting a suicide attempt. The national average among high school students is 9%.

## Maternal, Child, and Adolescent Health

- Similar to national trends, Gilpin County's low birth weight rate is slowly increasing.
- Gilpin County's low birth weight rate, 9.5%, is slightly higher than Colorado's rate of 9.1%.
- Gilpin County's low birth weight rate is comparable to other mountainous regions in Colorado and in the nation.
- The adolescent birth rate in Gilpin County is zero per 1,000 females aged 15 – 17 years.
- The reported suicide rate for Gilpin County teens between ages 15 and 19 years is zero, which may be incorrect given the incidence of suicide deaths for this age group in the region, especially mountain areas, the state, and nation.
- The percent of unintended births in Gilpin County has increased steadily since 2000 at an average rate of 36.7%.
- 93% of mothers in Gilpin County initiate prenatal care during the first trimester of their pregnancy, which is higher than the *Healthy People 2010* goal of 90%.
- Gilpin County's infant mortality rate is less than three deaths per 1,000 births, which is far less than the Colorado rate.
- 91.5% of Gilpin County newborns are screened for hearing at birth. This rate is below Colorado's newborn screening rate of 97.5% and the State's goal of 98% of all newborns.
- In Gilpin County, 55% of children have had some experience with dental disease, slightly under Colorado's rate of 57% and both well above *Healthy People 2010*'s goal of 42% or less.
- The rate of child abuse in Gilpin County has increased dramatically since 2000 (1.0 per 1,000). In 2006, there were 10.5 cases of abuse for every 1,000 children. The rate for Gilpin is higher than the state's of 9.2 per 1,000 and close to the *Healthy People 2010* goal of 10.3 per 1,000 or less.
- The rate of injury-related hospitalizations for children between ages 0 and 19 years of age in Gilpin County has increased steadily since 2002. The County's rate, 416.5 injuries per 100,000, is much higher than Colorado's, 295.2 and *Healthy People 2010*'s goal of 230.0 or less.
- *Healthy People 2010* sets targets for the number of third grade children who experience dental disease (treated or untreated), untreated dental decay, and dental sealants. This information is not available for Gilpin County; however, surveys such as the Youth Risk Behaviors Survey or locally conducted surveys could provide more information in this area.

## **Immunizations**

- About 4 out of 5 kindergarten children (75%) and 3 out of 5 children in childcare (56%) have received all their childhood vaccinations (Denver/Metro Area). The *Healthy People 2010* target is at least 90% of all children between the ages of 19 and 35 months.
- Information on adult rates of immunizations, in particular influenza and pneumonia, is not available for Gilpin County. Over-sampling of state-conducted surveys and/or locally conducted surveys could provide more information in this area.

## **Injury and Violence**

- Gilpin County's suicide rate of 41.2 per 100,000 is significantly higher than Colorado's rate (16.0 per 100,000) and the *Healthy People* target of 5.0 or fewer suicide deaths per 100,000 people.
- Gilpin County's motor vehicle crash death rate is 26.1 per 100,000 and is much higher than Colorado's rate of 15.9 and the *Healthy People 2010* target of 9.2 or fewer deaths per 100,000.
- Gilpin County residents are hospitalized because of motor vehicle crashes at a rate of 163.8 per 100,000, which is higher than Colorado's rate of 96.5 per 100,000.
- Falls account for 34 percent of all injury hospitalizations in Gilpin County. The rate of fall-related hospitalizations in Gilpin, 357.5 per 100,000, is slightly higher than Colorado's rate of 340.6 per 100,000.
- For every 100,000 hospitalizations in Gilpin County, an average of 24 are a result of an assault/attempted homicide, a rate slightly lower than Colorado's, 27 per 100,000.

## **Healthy Environments**

- Gilpin County is in an unmonitored and, therefore, unregulated air quality control area.
- Eighty-seven percent of County residents rely on wells and septic systems.

## **Infectious and Emerging Diseases**

- Gilpin County reported no incidence of tuberculosis, syphilis, or West Nile Virus in the last 10 years.
- Similar to state and national trends, Gilpin County's rate of Hepatitis C, 0.2 percent of all cases in Colorado, is increasing.
- By June 2007, 15 people were living with HIV/AIDS in Gilpin County.
- The rates for gonorrhea and Chlamydia are lower in Gilpin County (21.0 per 100,000 and 50 per 100,000, respectively) than in Colorado (61.5 per 100,000 and 281.3 per 100,000, respectively).
- Similar to state trends, vaccine-preventable diseases such as whooping cough are on the rise in Gilpin County.

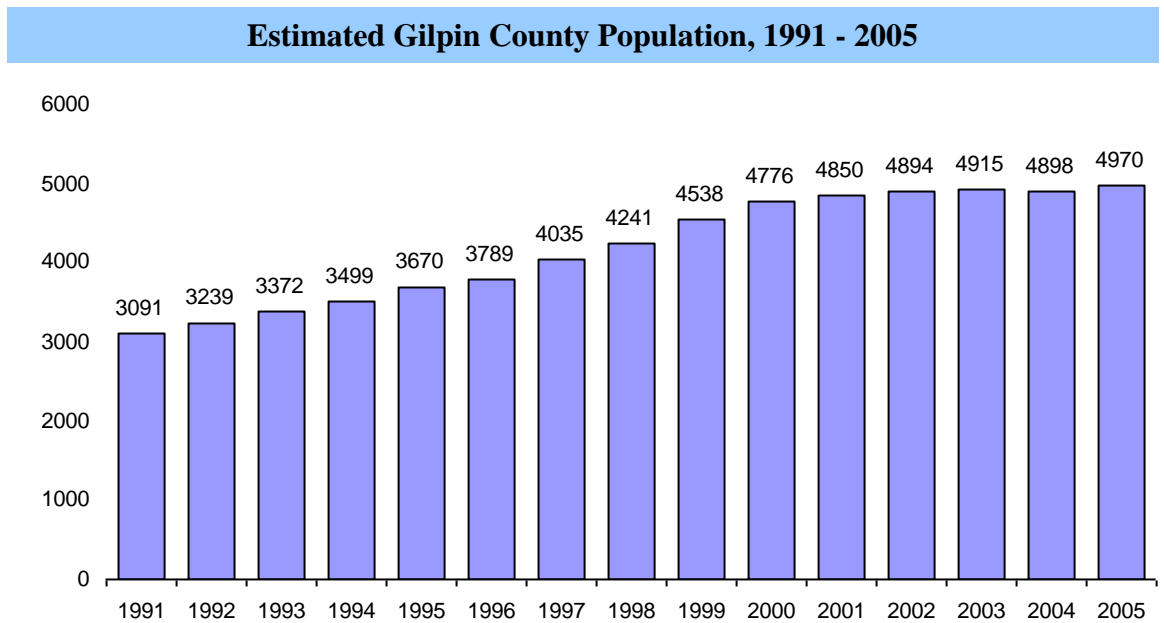
## Demographic and Social Profile

In this section, basic characteristics of Gilpin County's population are described such as age, race/ethnicity, and gender composition. Social and economic conditions of the population are also described such as income, educational achievement, employment, and cost of living. All these factors, and more, influence the social and economic health of the population, which in turn is part of determining the individual and collective health of the population.

Gilpin County covers an area of 150 square miles and is the second smallest in size in the state. Fifty-one percent of the County is publicly-owned forestland. It is bordered by Jefferson, Boulder, Clear Creek, Grand, and Summit Counties and is approximately 40 miles northwest from Denver. Gilpin County has three town centers, Central City (the County seat), Black Hawk, and Rollinsville (unincorporated). The county is divided into two school districts: Gilpin RE-1 and Boulder Valley School District RE-2. Beyond the three towns, Gilpin has 63 subdivisions, many of which have distinct features.

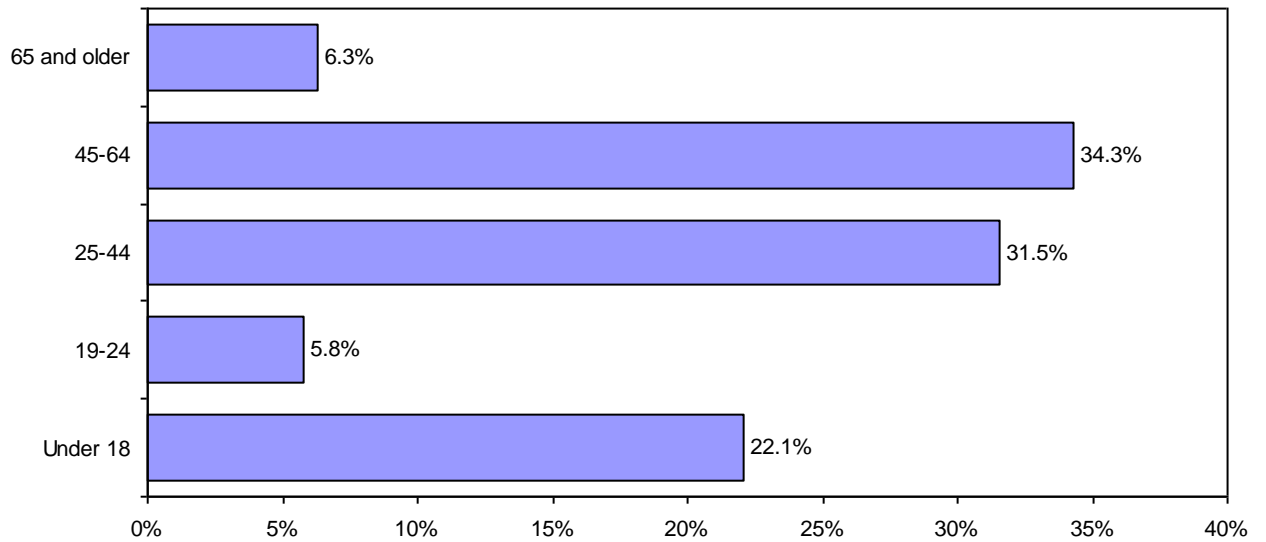
## Population

Gilpin County's population has increased by 62% since 1991. In 1991, the estimated population in the county was 3,091. In 2005, the county-estimated population was 4,970. Fifty-three percent were females and forty-seven percent were male. The median age was 38.3 years. Twelve percent of the population was under 18 years and 6.3% was 65 years and older.



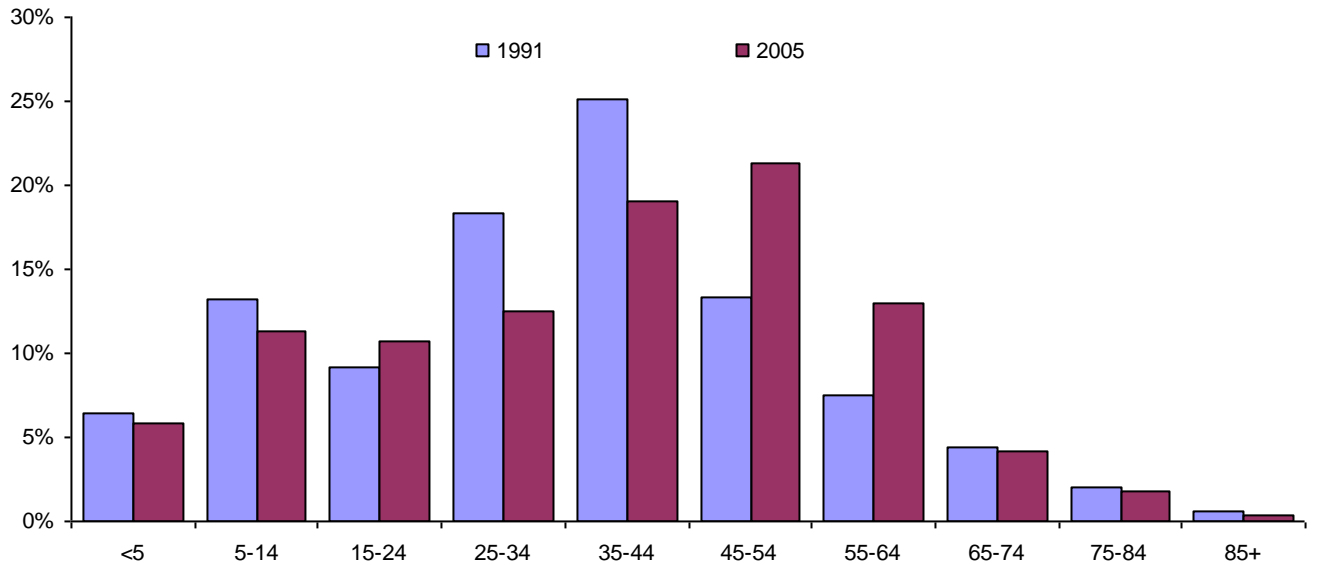
Data Source: CoHID

### Age Distribution of People in Gilpin County, 2005



Data Source: CoHID

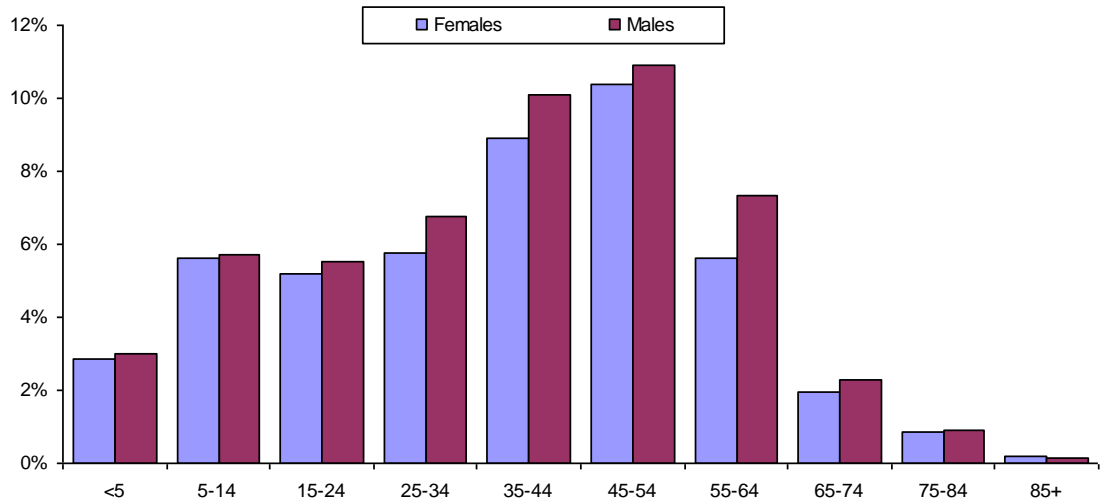
### Age Distribution, Gilpin County, 1991 and 2005



Data Source: CoHID

The age structure of Gilpin County's population shifted between 1991 and 2005. As a percentage of the total population, the age groups 0 to 14 and 25 to 44 decreased. The age groups 15 to 24 and 45 to 64 increased. The population aged 65 and older remained nearly the same. The trend for age groups 25 to 34 and 45 to 54 is similar to the national pattern and the aging of the baby boom generation. The decrease in the population for the age group 35 to 44 is a notable difference.

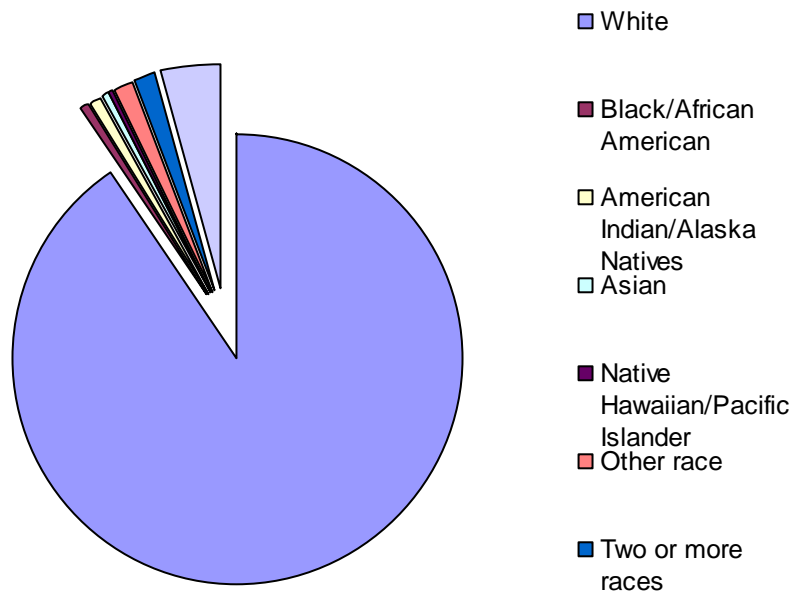
### Population by Age and Gender, Gilpin County, 2005



Data Source: CoHID

There are more males than females in every age group except for the age group 85 and older in Gilpin County.

### Race and Ethnicity, Gilpin County, 2000



Data Source: Colorado Demography Office, U.S. Census Bureau

In Census 2000, for the first time, participants were able to check more than one race. This resulted in 1.9% of Gilpin County’s population being two or more races. Whites are the majority of the population with 94.4%. Latinos of any race are 4.2%. Those of some other race are 1.5%. African American, American Indian, Asian, and Hawaiian/Pacific Islanders are less than 1% each.

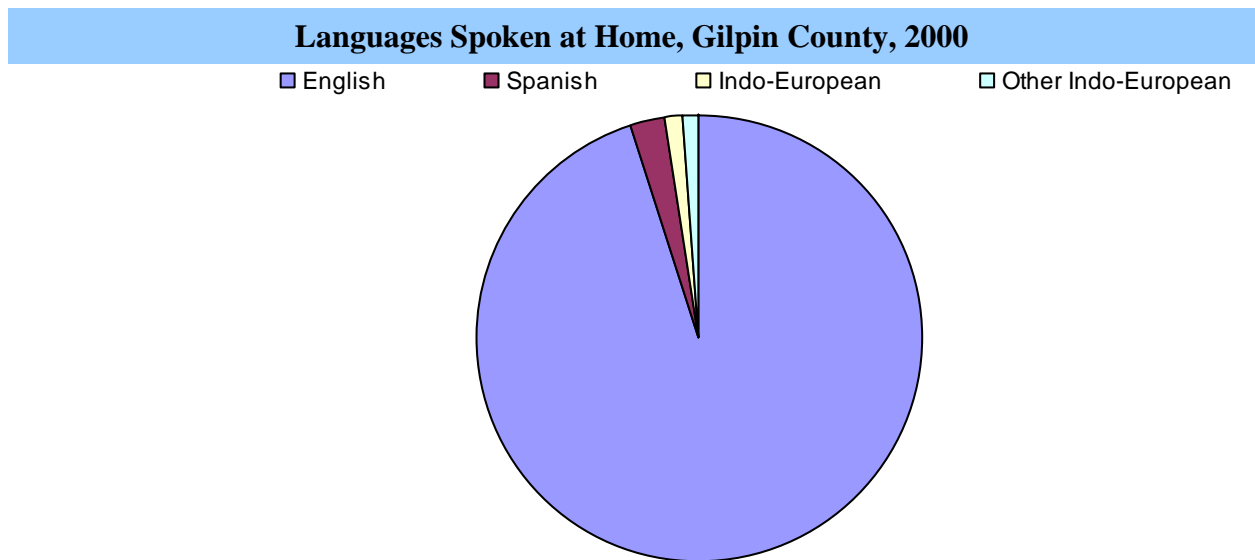
In 2005, for people reporting one race alone, 96.4% were White; 0.9% were Black or African American; 0.6% were American Indian and Alaska Native; 1.3% were Asian; and zero were Native Hawaiian and Other Pacific Islander. 0.8% reported two or more races. 4.6% of the people in Gilpin County were Hispanic. 92.1% of the people in Gilpin County were White non-Hispanic. People of Hispanic origin may be of any race.

Between 1970 and 2000, the White population decreased as a percent of the total population while the Latino/Hispanic and other and multiple race populations increased. These trends are expected to continue at least through 2010. African American, American Indian, Asian, and Hawaiian/Pacific Islander populations remained stable over time at around 1%.

### Households and Families

In 2005, there were 2,134 households in Gilpin County. The average household size was 2.32 people. Families make up 67% of households in Gilpin County (includes married-couple families and other families). Non-family households made up 37% of all households in Gilpin County. Most of the non-family households were people living alone.

English is the primary language spoken at home in 95% of Gilpin County households; Spanish is spoken in 2.5% of households; other Indo-European languages are spoken in 1.6% of households; and other languages are spoken in the remainder.



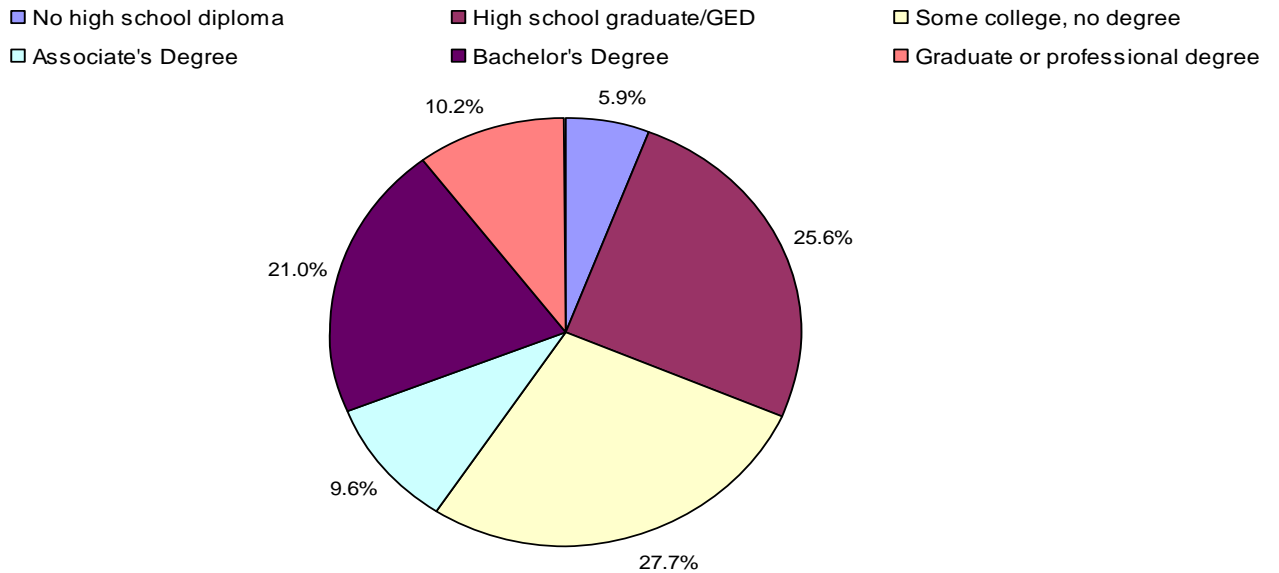
Data Source: Colorado Demography Office

### Education

In the 2007-2008-school year, the total school enrollment in the Gilpin School District was 368. Total Elementary School enrollment is 231 and total Secondary School enrollment is 137. Traditional pre-school and kindergarten enrollment is 33. Montessori enrollment, which is a preschool to 3<sup>rd</sup> grade program, has 38. Home-school student enrollment is not tracked through the local school district and, therefore, those data are not available.

In 2000, 94% of Gilpin County adults 25 years and older compared to 87% of Colorado adults overall had graduated from high school. Twenty-one percent had graduated college.

## Educational Attainment, Adult 25 and Older, Gilpin County, 2000



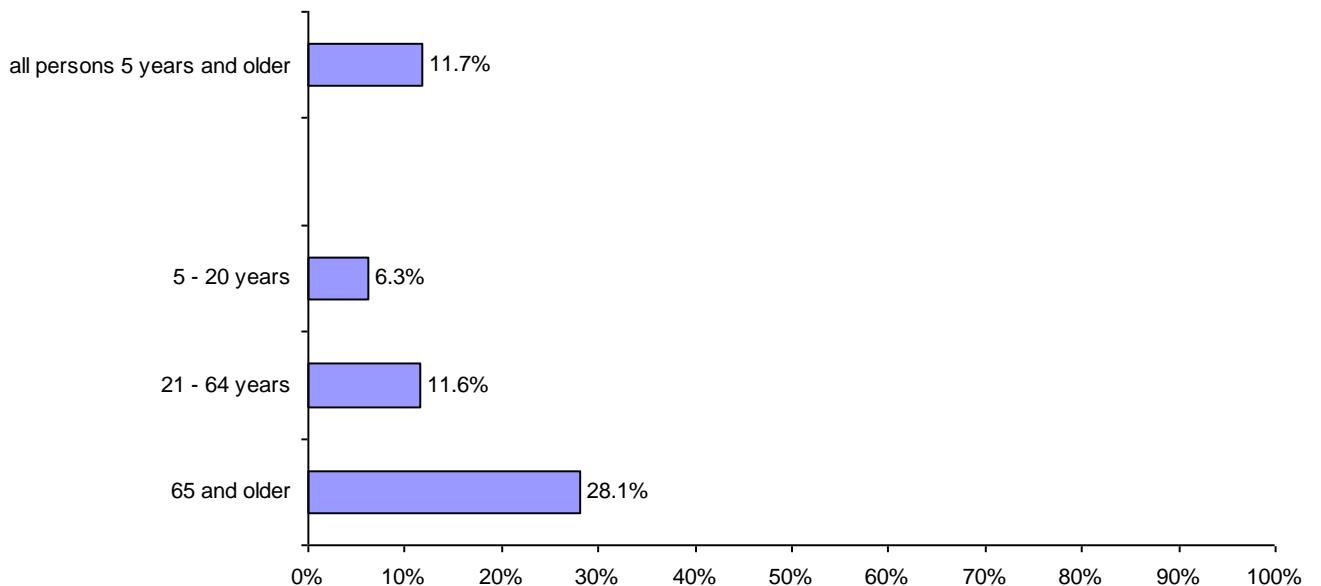
**Data Source: U.S. Census Bureau**

The percentage of students enrolled in the Free and Reduced Price Lunch Program (FRPL) is often used as an indirect measure of poverty. 18.6% of students in Gilpin County School District are eligible for free and reduced price lunches.

### Disability

In Gilpin County, among people at least five years old in 2000, 11.7% reported one or more disabilities. The likelihood of having a disability varied by age – 6.3% of people 5 to 20 years old, to 11.6% of people 21 to 64 years old, and to 28.1% of those 65 and older.

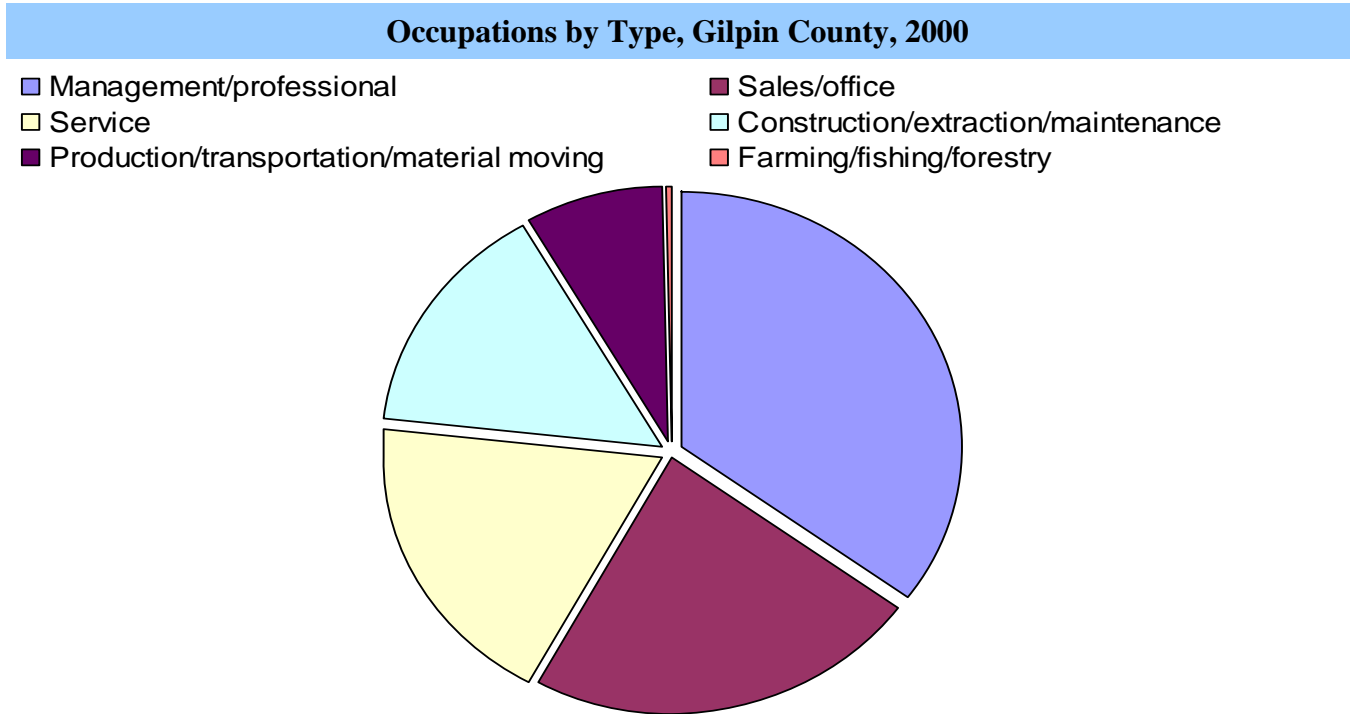
## Percent of Persons with One or More Disabilities by Age, Gilpin County, 2000



**Data Source: 2005 American Community Survey, U.S. Census Bureau**

## Occupations

Some of the most common occupations were: management, professional, and related occupations, 35%; sales and office occupations, 22.7%; service occupations, 19%; construction, extraction, maintenance and repair occupations, 14.9%; production, transportation, and material moving occupations, 8.2%; and farming, fishing, forestry occupations, 0.2%. Seventy-four percent of the people employed were private wage and salary workers; 14.2% were federal, state, or local government workers; and 11.5% were self-employed, non-incorporated business workers.



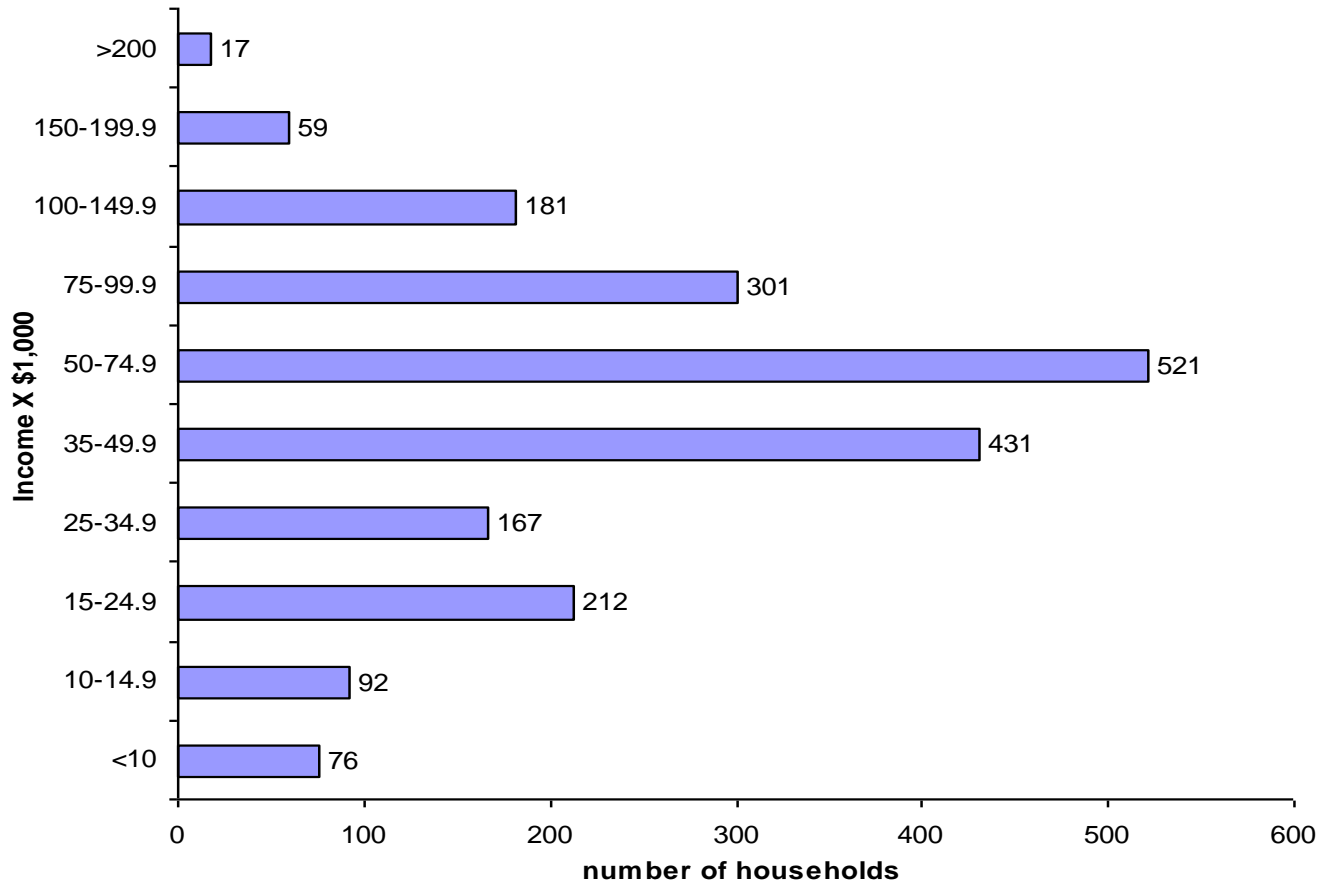
Data Source: U.S. Census Bureau, 2000

## Income

Family income is defined as the income of all members 15 years and older related to the householder. Median family income is an annual income figure for which there are as many families with incomes below that level as there are above that level. It is the median income of all families living in a geographic area, in other words the middle value when all family incomes are arranged from highest to lowest. In 2000, the median family income in Gilpin County was \$61,859, higher than the state median family income of \$55,883.

Household income is defined as the income of the householder and all other individuals 15 years and over living in the household regardless of relationship to the householder. In 2004, the median income of Gilpin County households was \$54,194. Ninety-one percent of the households received earnings and 9.6% received retirement income other than Social Security. 14.7% of the households received Social Security. The average income from Social Security was \$10,550. These income sources are not mutually exclusive; that is, some households received income from more than one source.

## Household Income by number of households, Gilpin County, 2000

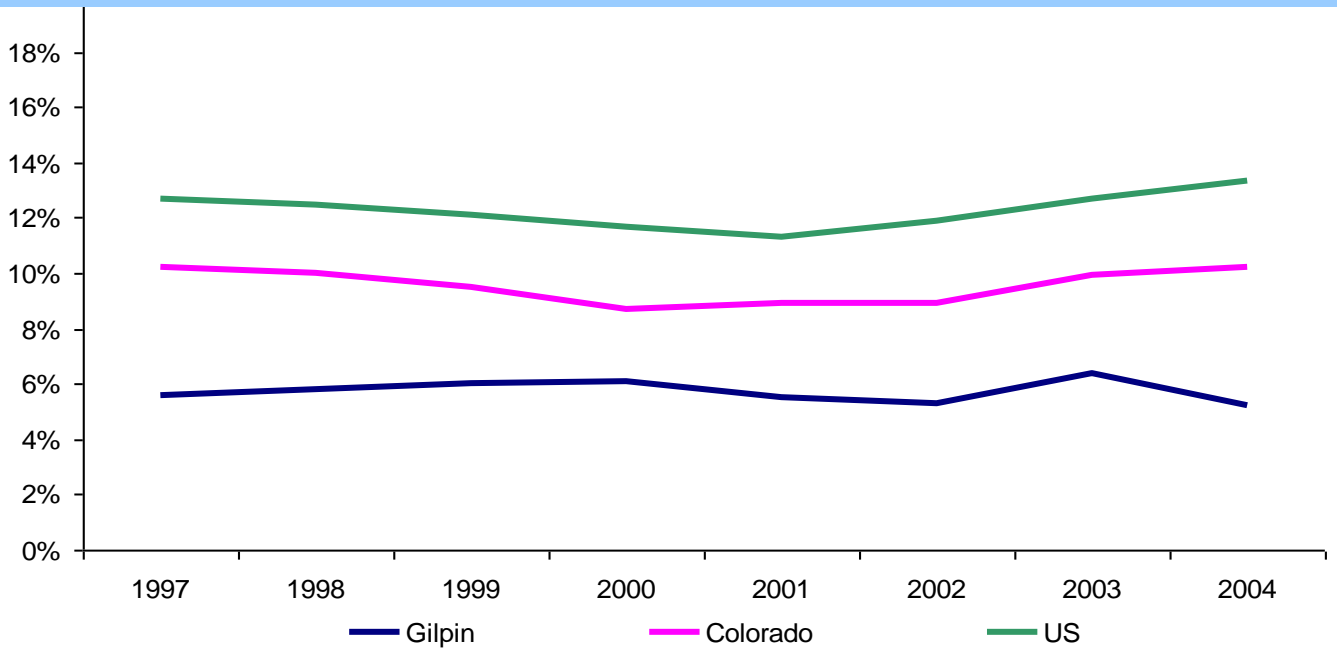


Data Source: U.S. Census Bureau

### Poverty

Poverty is defined by the federal government using a set of money income thresholds that vary by family size and composition. If a family's income is below the threshold, then everyone in the household is considered in poverty. The poverty thresholds do not vary geographically, but are updated annually based on inflation using the Consumer Price Index. Poverty thresholds and rates are just one yardstick to gauge a family's economic well-being, but they do not provide a complete description of what families need to live.

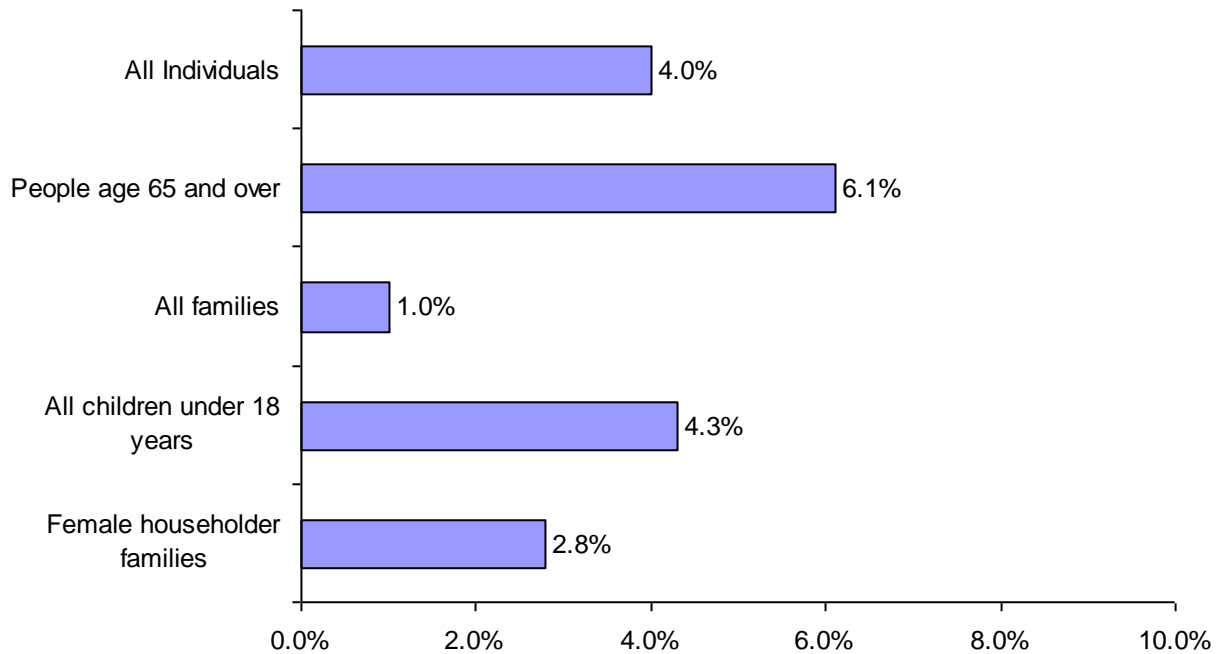
### Percentage Living in Poverty, Gilpin County, Colorado, and U.S. 1997-2004



Data Source: U.S. Census Bureau, Small-Area Income, and Poverty Estimates

The percent of people in Gilpin County and in Colorado in poverty declined between 1997 and 2004. During the same time, the percent of people in the United States in poverty increased. The poverty rate in Gilpin County is substantially lower than that of Colorado and the United States.

### Poverty Rates in Gilpin County, 2000



Data Source: 2000 Census

In 2000, 4% of people living in Gilpin County were in poverty. 1.4% of related children under 18 were below the poverty level, compared with 6.1% of people 65 years old and over. 1% of all families and 2.8% of families with a female householder and no husband present had incomes below the poverty level (Census, 2000).

Many families are not poor according to the official poverty measure, but their incomes are inadequate. The self-sufficiency standard reported here measures how much income is needed for a family of four to adequately meet their needs without public or private assistance. In 2006, in Gilpin County, the annual self-sufficiency income needed for such a family was \$45,009.

### Housing Characteristics and Costs

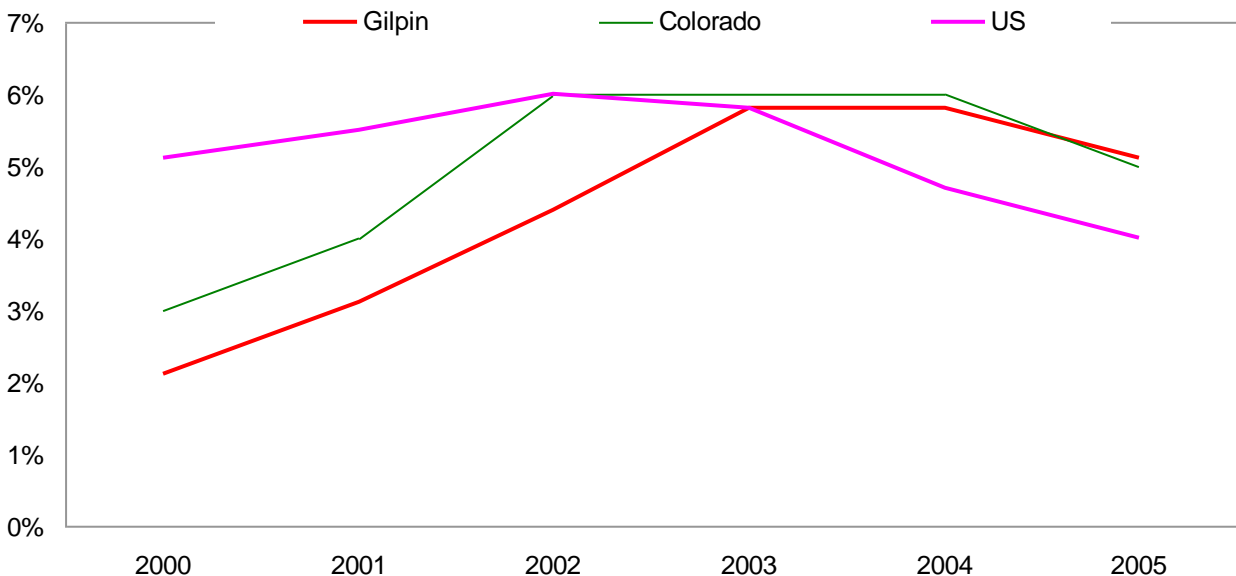
In 2000, Gilpin County had 2,929 housing units, of which 30% were vacant. Of the total housing units, 91.4% were in single-unit structures, 6.9% were in multi-unit structures, and 1.7% were mobile homes, boats, RV's, and or vans. Twenty-eight percent of the housing units were built since 1990. Of the specified-occupied housing units, 66.7% were owner-occupied and 20% were renter-occupied. 2.6% of the households did not have telephone service or access to a car, truck, or van for private use; however, most households had access to two or more vehicles (72.3%). Fourteen percent of households used electricity as a source of heat; 15% used wood as a source of heat; 51.2% used bottled or tanked propane gas; and 16.1% used utility gas.

In 2000, the median monthly housing costs of mortgaged owners was \$1,222, for non-mortgaged owners \$229, and renters \$842. 32.3% of owners with mortgages and 44.5% of renters in Gilpin County spent 30% or more of household income on housing.

### Unemployment

Unemployment has increased from historic lows in 2000. In Gilpin County, the percent of unemployed workers increased from 2.1% in 2000 to 5.8% in 2004. The rate decreased slightly in 2005 to 5.1%. From 2000 to 2005, Gilpin County's unemployment rate was lower than Colorado's and the United States.

**Annual Unemployment Rate, Gilpin, Colorado, & United States, 2000 -2005**



Source: Colorado Demography Office

## Health Insurance

People who lack health insurance are likely to delay getting health care and are at risk for experiencing adverse health outcomes.

In the United States, the number of people with health insurance coverage increased slightly from 245.9 million in 2004 to 247.3 million in 2005. In 2005, about 16% of 46.6 million people were without health insurance coverage, up from 45.3 million people in 2004. The percentage of people covered by employment-based health insurance remained the same between 2004 and 2005 at 60%. Similarly, the percentage of people covered by government health insurance programs remained at 27% between 2004 and 2005 (DeNavas-Walt, C., Proctor, D.B., & Hill-Lee, C., 2006).

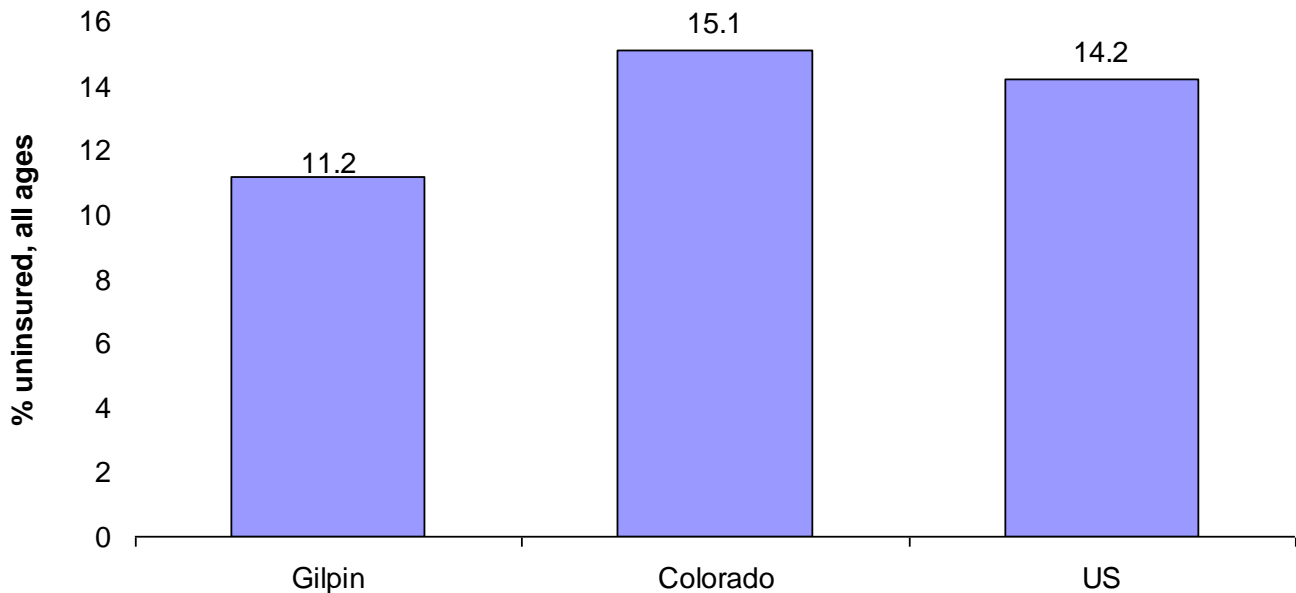
In 2004, about 17% or 770,000 people in Colorado were uninsured, which is slightly above the national average. Colorado's uninsured rate has not changed significantly since 1999. Although some rural Colorado areas have high-uninsured rates, the greatest number of uninsured are found in urban areas. 11.2% of Gilpin County residents are uninsured.

A higher percentage of Colorado's population is covered by private health insurance than the national average; however, a lower percentage is covered by public health insurance than the U.S. It is unknown how many adults in Gilpin County are covered by private insurance.

Rates of health insurance often vary by age, race, and education level. Data from 2005 indicate a positive association between health insurance and age and health insurance and educational attainment. The number of Gilpin County residents who have health insurance according to age and education is not known.

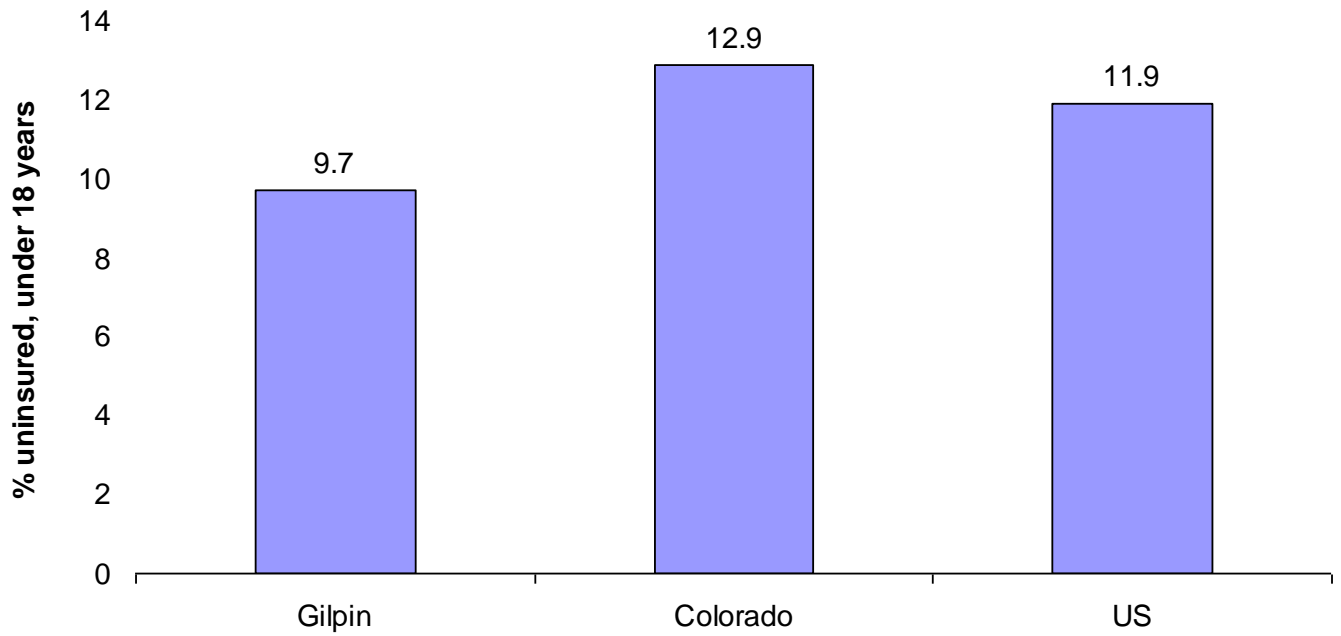
Among children in Gilpin County, an estimated 9.7% are without health insurance (2000), which is lower than Colorado and the nation's rates.

**Percentage of Uninsured Gilpin County, Colorado and US, 2000**



Data Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program

**Percentage of Children under 18 Who Are Uninsured, Gilpin County, Colorado, and US 2000**



Data Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program

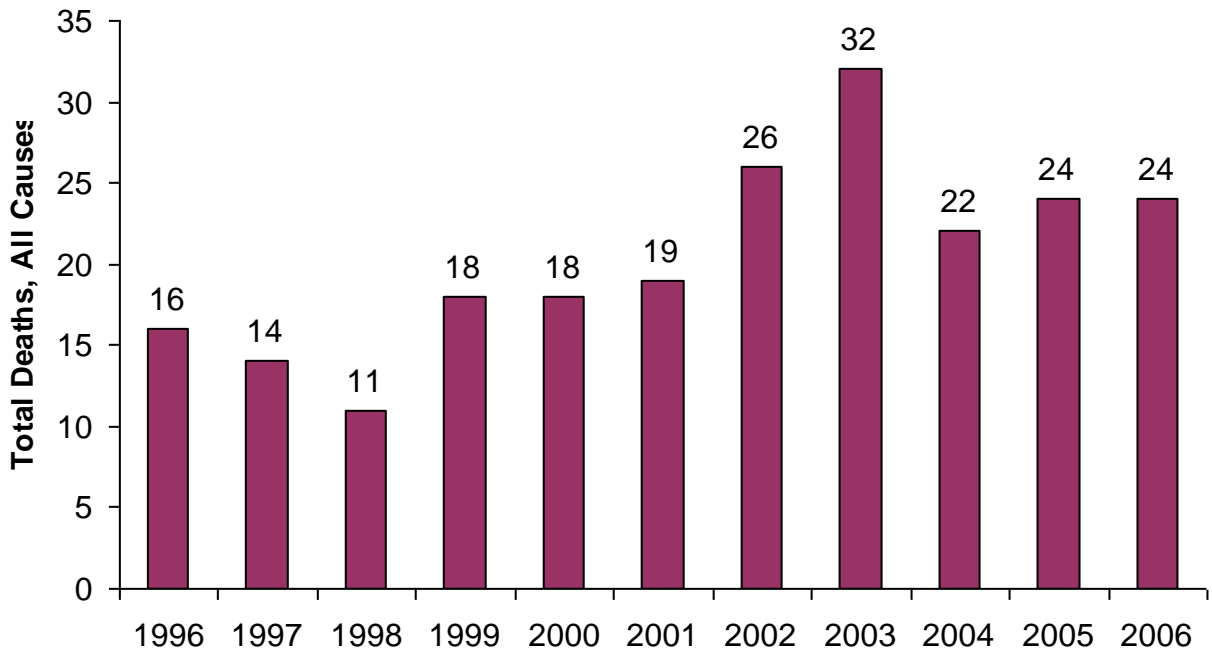
## Leading Causes of Death

### All Cause Mortality

Measuring death rates from all causes is a tool for monitoring progress in fighting disease and improving health. In 2004, 2,398,343 deaths occurred in the United States and the age-adjusted death rate from all causes was 801 per 100,000-population, a record low historical figure. In Colorado, it was 782 for the period 2000 – 2005.

From 1996-2006, an average of 24 people per year died in Gilpin County. The death rate was 872.2 per 100,000-population. Gilpin County's death rate was higher than Colorado's during the same time.

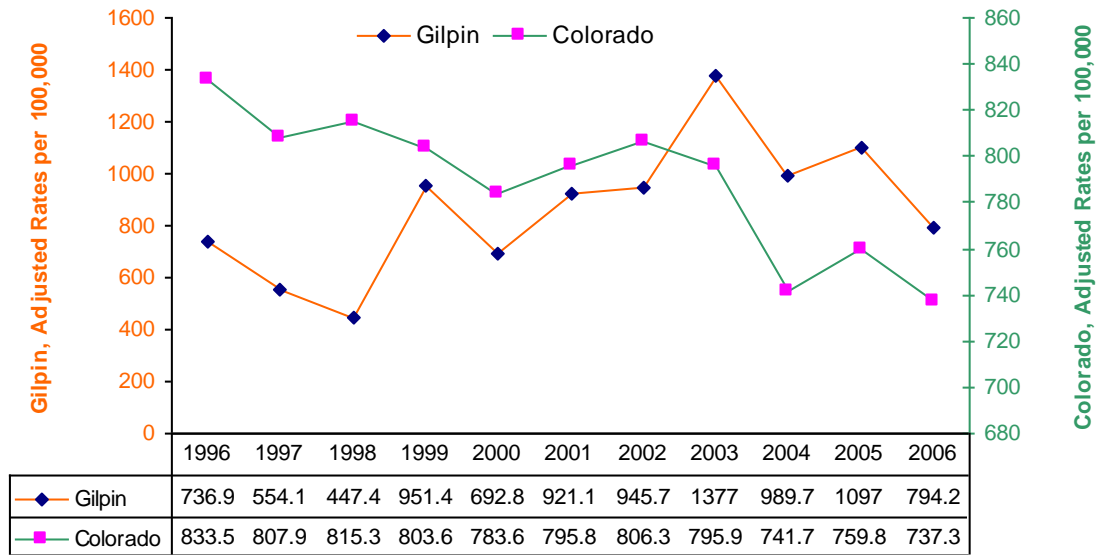
**Total Deaths from All Causes, Gilpin County, 1996 -2006**



Data Source: Colorado Health Information Dataset

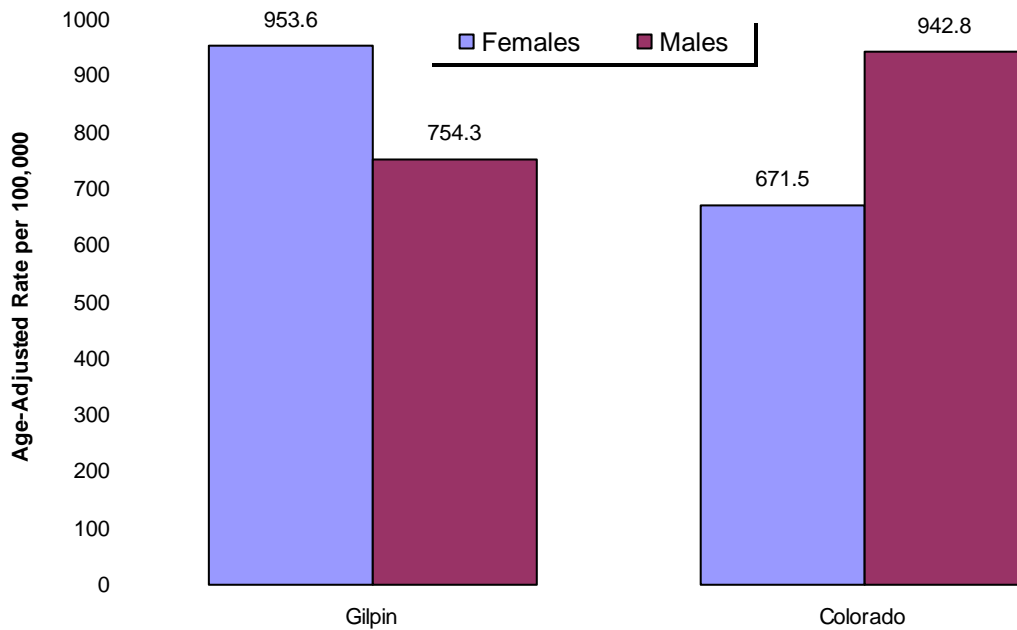
Although Gilpin County's death rate has been higher than Colorado's death rate since 2001, Gilpin County and Colorado's death rates show similar trends and have been decreasing since 2003, following similarly declining U.S. mortality rates.

## Age-Adjusted Death Rate from All Causes, Gilpin, and Colorado, 1996 -2006



Data Source: Colorado Health Information Dataset

## Death from All Causes by Gender, Gilpin County, and Colorado, 1996 -2006



Data Source: Colorado Health Information Dataset

From 1996 – 2006, the age-adjusted death rate for Gilpin County females was 26% greater than that for males. This pattern is opposite to Colorado for the same period, 1996 – 2006, and the United States in 2004.

## Leading Causes

Leading causes of death are the most common causes of death. They are generally ranked according to their frequency. Here we consider the ten most common causes of death.

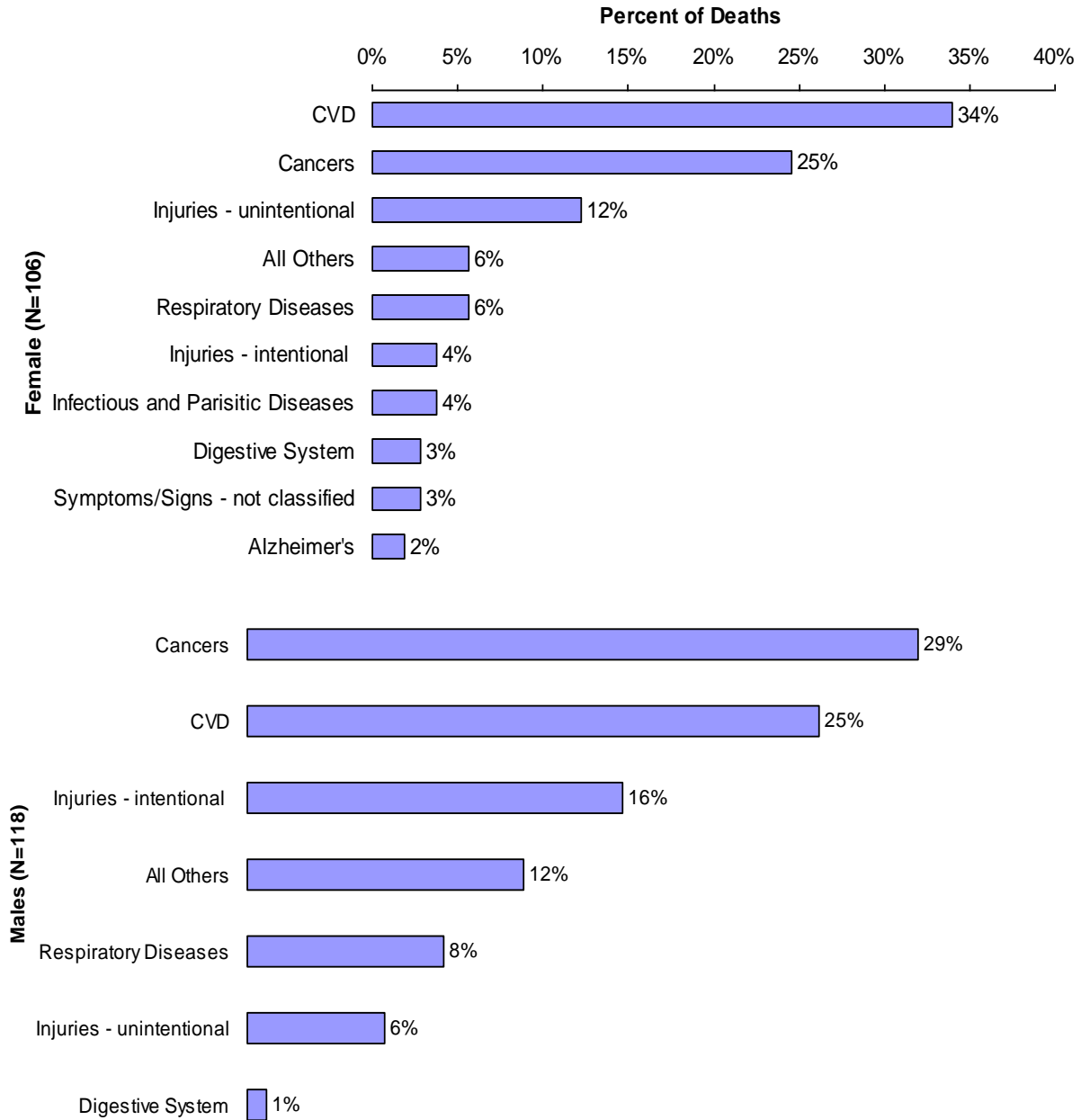
In 2003, the ten leading causes of death accounted for 78% of all deaths in the United States. Five chronic diseases account for almost two-thirds of all deaths in the United States – heart disease, cancer, stroke, chronic lower respiratory disease, and diabetes.

From 1996 – 2006, there were 224 deaths among Gilpin County residents, an average of 23 per year. The five leading causes of death in Gilpin County accounted for 82% of this total. Cardiovascular disease, cancers, and suicide, the three leading causes of death in Gilpin County, accounted for 66% of all deaths. Unintentional injuries (motor vehicle accidents, poisoning) and respiratory diseases (chronic lower respiratory diseases and pneumonia) ranked fourth and fifth, respectively, followed by digestive system diseases (alcoholic liver and cirrhosis) and infectious and parasitic diseases.

Males and females had slightly different patterns of leading causes of death. Both males and females had the same two leading causes of death – cancers (first for men, second for women) and cardiovascular diseases (first for women, second for men). Among females, these accounted for 58% of all deaths. The third leading cause of death among Gilpin County females was unintentional injuries (motor vehicle accidents and poisoning) followed by respiratory diseases (chronic lower respiratory diseases), intentional injuries (suicide), infectious and parasitic diseases, and digestive system diseases (alcoholic liver). Digestive system, infectious and parasitic diseases, and Alzheimer's disease ranked in the top ten for females while they did not for males.

The two leading causes of death among males -- cancers and cardiovascular diseases -- accounted for 53% of all deaths. The third leading cause of death among Gilpin County males was intentional injuries (suicide) followed by respiratory system diseases, and unintentional injuries. These five leading causes of death for males in Gilpin County account for 84% of all deaths.

## Leading Causes of Death by Gender, Gilpin County, 1996 -2006

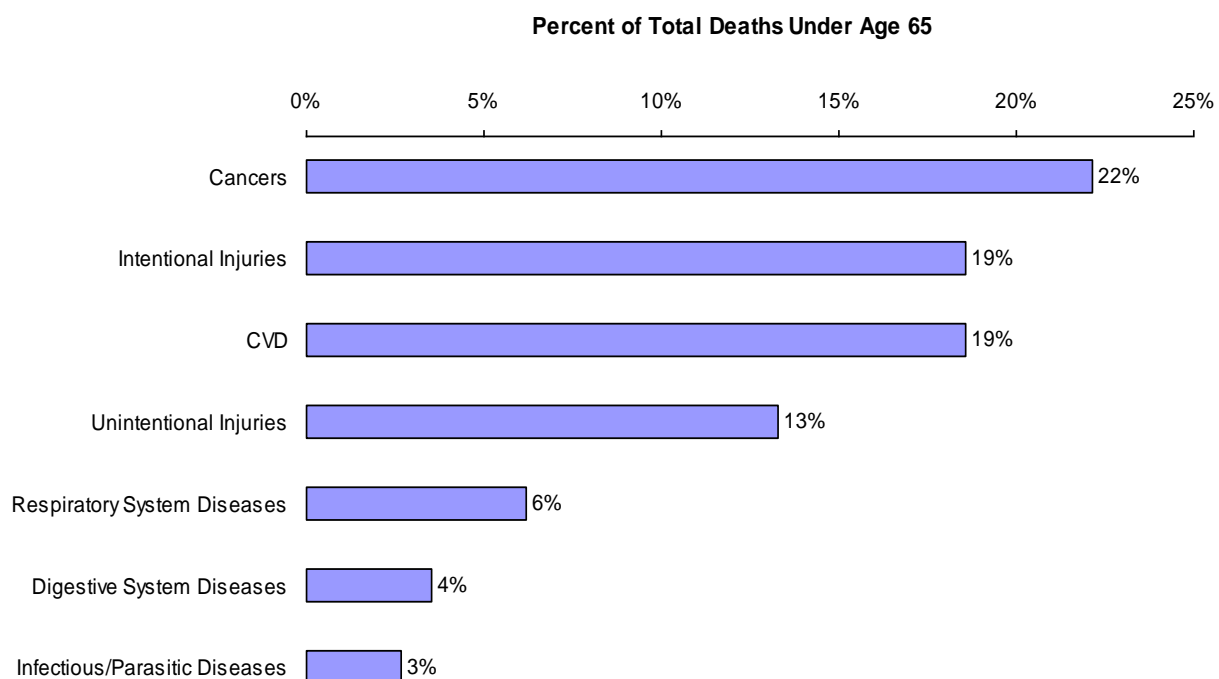


Data Source: Colorado Health Information Dataset

### Leading Causes of Premature Death

Years of potential life lost (YPLL) is a measure of premature or early death. Death rates are dominated by causes of death common among elderly populations. The measure of years of potential life lost reflects mortality patterns among younger age groups. By weighting deaths occurring at younger age more heavily than those that occur at older ages, a more accurate picture of premature mortality can be examined. YPLL is a mortality index that can demonstrate avoidable deaths. One measure of YPLL represents the numbers of years of life lost due to death before age 65 among summed over all age groups. Due to the small sample size available over even ten years of death information, a measure of YPLL for Gilpin County cannot be calculated. Instead, only a profile of the leading causes of death for Gilpin County residents between the ages of 0 and 65 years is included.

## Leading Causes of Premature Death, ages 0 -65 years, Gilpin County, 1996 -2006

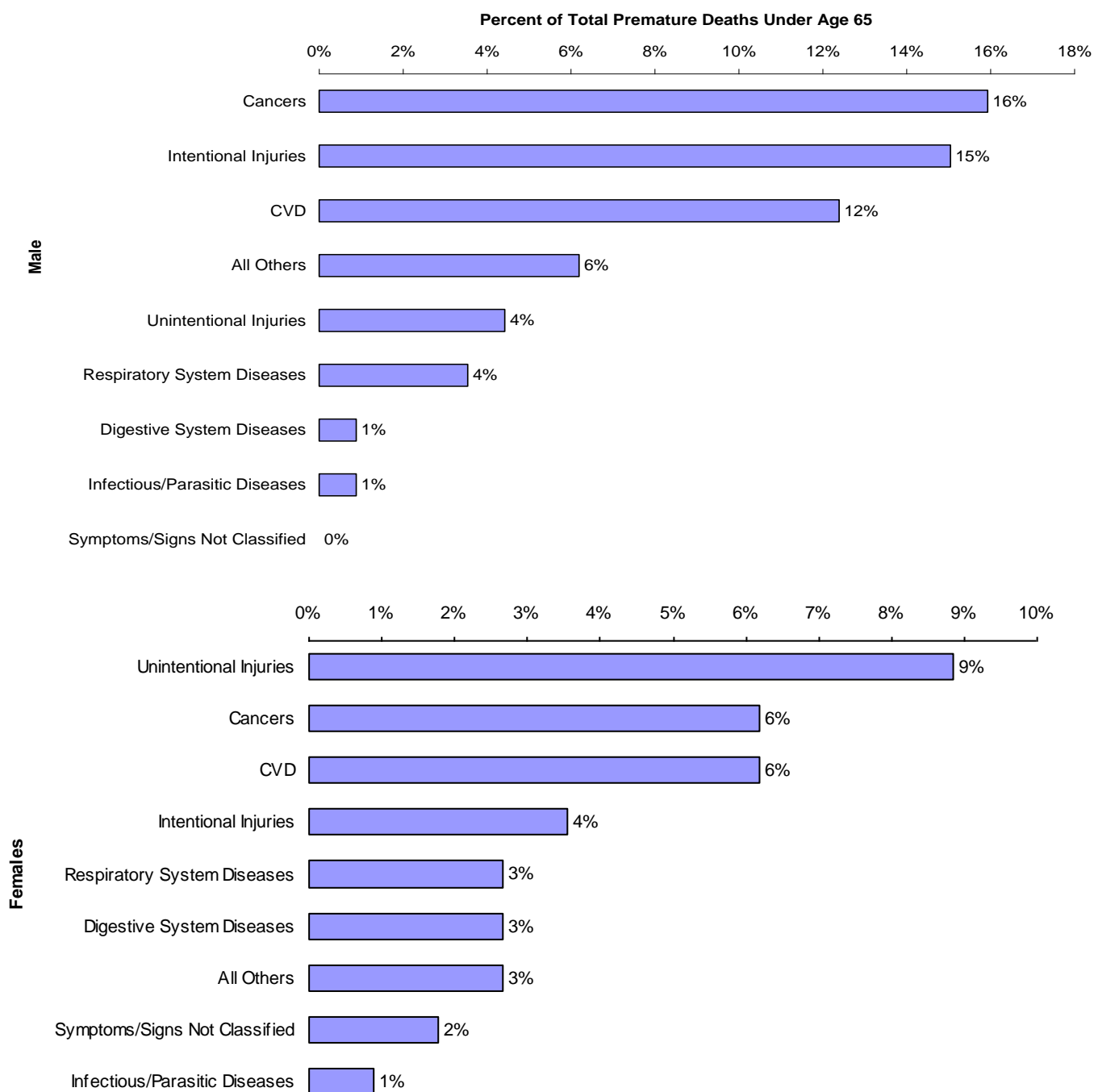


Data Source: Colorado Health Information Dataset

In Gilpin County during 1996-2006, the leading cause of death for residents between age 0 and 65 years was cancers. One notable difference between leading causes of death and leading causes of premature death is that deaths from intentional injuries surpassed cardiovascular diseases as a leading cause of premature death.

The leading cause of premature death for females in Gilpin County is unintentional injuries followed by cancers, cardiovascular diseases and intentional injuries. The leading cause of premature death for males is cancer followed by intentional injuries, cardiovascular diseases, an undefined category called all others, and unintentional injuries. Of the 21 total premature deaths caused by intentional injuries (17 suicides and 4 homicides), 14 were by firearm and 12 of those deaths were males. Of the 15 total premature deaths caused by unintentional injuries (seven motor vehicle accidents, three poisonings, two drowning, 1 fall, and two unspecified), 10 were females.

## Leading Causes of Premature Death, Ages 0 -65 years, by Gender Gilpin County, 1996 -2006



Data Source: Colorado Health Information Dataset

### Healthy Lifestyles

As was shown in a previous section, chronic diseases, such as cardiovascular diseases, cancers, and digestive and respiratory system disease are responsible for 69% of deaths in Gilpin County. They are the leading cause of disability and death in the United States. Although chronic diseases are among the most prevalent health problems, they are also the most preventable. The major chronic diseases – heart disease, cancer, stroke, chronic lower respiratory disease, and diabetes – result from our lifestyle and our habits of daily living. Health-damaging behaviors include lack of physical activity, poor eating habits, and tobacco use.

## **Physical Activity**

The Surgeon General defines moderate physical activity as any activity that causes small increases in breathing or heart rate for at least 30 minutes a day for at least 5 times a week. No data exist for the number of adults in Gilpin County who are moderately physically active. In 2005, 41% of Colorado adults were moderately physically active. The *Healthy People 2010* target is 30% of all adults.

Similarly, no such data exists for high school students in Gilpin County. A *Healthy People 2010* target indicates that 85% of all high school students should participate in vigorous exercise 3 or more of the past 7 days.

## **Nutrition and Weight**

Nutrition and weight affect the risk of developing many chronic diseases. Nutrition is essential for growth and development, health, and well-being. Dietary factors are associated with four of the 10 leading causes of death – heart disease, some cancers, stroke, and diabetes. Choosing a diet high in fruit and vegetable content among other things reduces the risk of obesity-related diseases and improves health outcomes. The indicator reported here – the proportion of adolescents/adults who eat at least five fruits or vegetable servings a day – does not have a comparable *Healthy People 2010* objective; however, this indicator is used extensively across the country to gauge dietary behaviors.

No information is available specific to the number of people (adults and children) in Gilpin County who consume the recommended five fruit or vegetable servings a day. In 2005, 25% of Coloradoans ate at least five servings of fruits and vegetables a day.

People are considered overweight or obese based on their Body Mass Index (BMI). BMI takes into account gender and is calculated using a person's weight and height in order to estimate total body fat. Among children and adolescents, BMI also takes into account age. BMI has been shown to be a better predictor of disease risk than body weight alone. The risk of death from many chronic disease increases with a BMI over 25.0. Among adults, a BMI of 25.0 to 29.9 is considered overweight. Overweight among children and adolescents is based on growth-chart percentiles. Among adults, a BMI of 30.0 or above is considered obese.

Healthy weight is defined here as those persons with a BMI greater than 18.5 and less than 25.0. A person who is at a healthy weight is neither underweight nor overweight for his or her height. The number of people (children and adults) in Gilpin County who are at a healthy weight, at risk for overweight, are overweight, and/or are obese is not known. Relevant *Healthy People 2010* objectives include: 1) 60% or more adults are at a healthy weight; 2) 5% or less of high school students are at risk for overweight or overweight; and 3) 15% or less of adults are obese. In 2005, 44% of adults in Colorado were at a healthy weight. The proportion of adults who are overweight or obese has been increasing in Colorado and the United States.

## **Tobacco Use**

It is estimated that in the U.S. the health effects of smoking cause over 400,000 deaths each year, or roughly 20% of all deaths. In 2004, 21% of U.S. adults were current smokers. Cigarette smoking for adults is more common among men than among women. Nationally, cigarette-smoking rates are lowest among Asians (11%) and Hispanics (15%). Cigarette smoking estimates are highest for adults without a high school diploma (34%) and lowest for adults with a college degree (12%).

For adolescents, it is estimated that 23% of high school students in the United States are current cigarette smokers. Approximately, 26% of Whites and 22% of Hispanics in high school are current cigarette smokers. Each day an estimated 1,500 young people between the ages 12 and 17 years become daily smokers in the United States.

No data are available concerning smoking rates and behaviors for Gilpin County residents. Relevant *Healthy People 2010* objectives include: 1) 16% or less of high school students who smoke cigarettes and 2) 12% or less of adults smoking cigarettes. In 2005, 19% of Colorado high school students and 20% of adults smoked cigarettes.

## Substance Abuse and Mental Health

### *Substance Use and Abuse*

Substance use and its related effects are among society's top health and social concerns. Each year about 100,000 deaths in the United States are related to alcohol consumption including motor vehicle crashes, drowning, homicide, and suicide. Excessive alcohol consumption can lead to cirrhosis of the liver and other diseases. Alcohol abuse is also associated with heart disease, cancer, and stroke.

### *Alcohol and Marijuana*

One important goal of U.S. policy is to increase the percentage of youth who reach adulthood without using alcohol or illicit drugs. Alcohol and marijuana are the most commonly used drugs among adolescents. No such information is available for Gilpin County.

### *Binge Drinking*

The number of binge drinkers is one of many recognized indicators of substance abuse. Binge drinking is defined as consuming five or more alcoholic drinks on one occasion in the past month. Nationally, nearly 15% of people aged 12 and older reported binge drinking. Among all age groups, the rate is highest for young adults aged 18 to 25 years. More males than females binge drink.

No information is available regarding the percentage of Gilpin County high school students and/or adults who report binge drinking one or more times during any 30 days period. 29% of Colorado high school students and 28% U.S. high school students (28%) report to binge drinking. In 2003, 18% of adults aged 18 and older in Colorado and 17% of all U.S. adults reported binge drinking. The *Healthy People 2010* desired rate of binge drinking for adults is 6% or less.

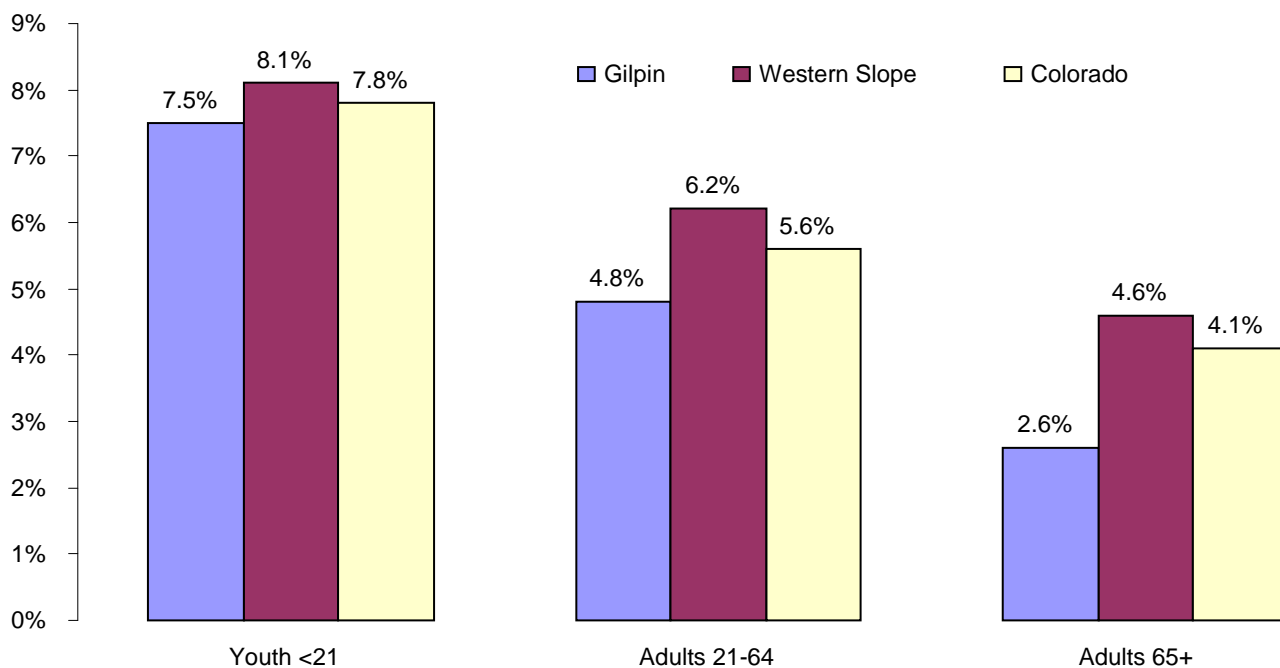
## Mental Health

Mental health is an important aspect of overall health and is often overlooked. Mental health is a state of successful performance of mental function that results in productive activities, fulfilling relationships, and the ability to adapt to change and cope with diversity. Mental disorders are conditions typically characterized by alterations in thinking, mood, or behavior, which are associated with distress or impaired functioning that can generate a variety of human problems including disability, pain, or death. Mental illness is the term that collectively refers to all diagnosable mental disorders (*Healthy People 2010*, 2001).

It is estimated that 20% of the U.S. population is affected by a mental illness during any given year. Of all the mental illnesses, depression is the most common. Major depression is a leading cause of disability and the leading cause of most suicides each year. The Leading Health Indicator objective for mental health is to increase the proportion of adults aged 18 years and older with recognized depression that receive treatment; however, data are not available for this indicator. Instead, two indicators are presented -- the percentage of youth and adults in need of mental health services and adults aged 18 years and older self-reported number of days that their mental health was not good.

A 2003 report from the Colorado Trust estimated the percentage of youth with severe emotional disorders (SED) and adults with severe mental illness (SMI) in need of mental health services in Colorado and all of its counties. The study found that in Gilpin County, 7.5% of youth under 21 years of age, 4.8% of adults aged 21 to 64 years, and 2.6% of adults 65 years and older were in need of mental health services. These rates were lower than the Western Slope Region and Colorado as a whole, particularly for the age group of 65 years and older.

### Percentage of Population in Need of SED/SMI Services, Gilpin County, Western Slope, and Colorado, 2000



Data Source: Mental Health Care in Colorado, Colorado Trust

## **Suicide**

Suicide is a complex behavior that often with early recognition and treatment of mental disorders can be prevented. It is one of the leading causes of death in the United States, Colorado, and Gilpin County. In 2003, un-weighted data for Colorado high school students were available for attempted suicide. Un-weighted data are data that only represent the students actually surveyed rather than the entire population. Such data is not available for Gilpin County high school students. In 2003, 13% of the Colorado high school students surveyed reported attempting suicide within the 12 months prior to being surveyed compared with 9% of students throughout the U.S.



## **Maternal, Child, and Adolescent Health**

The health of mothers, infants, and children is important, not only as a reflection of their current health and well-being, but also as a predictor of the next generation's health. Maternal behaviors before, during, and after pregnancy are correlated with positive as well as adverse health outcomes for both the mother and child. This section addresses issues concerning pregnancy planning, pregnancy outcomes, and infant, child, and adolescent health. Key indicators in this section include adequacy of prenatal care, low birth weight, and children's oral health. Many indicators are used to measure the health status of mothers, infants, and children. The indicators reported here are the only health indicators that have data specific to Gilpin County available. Nevertheless, these indicators do serve as good snapshots of maternal and child health in the County.

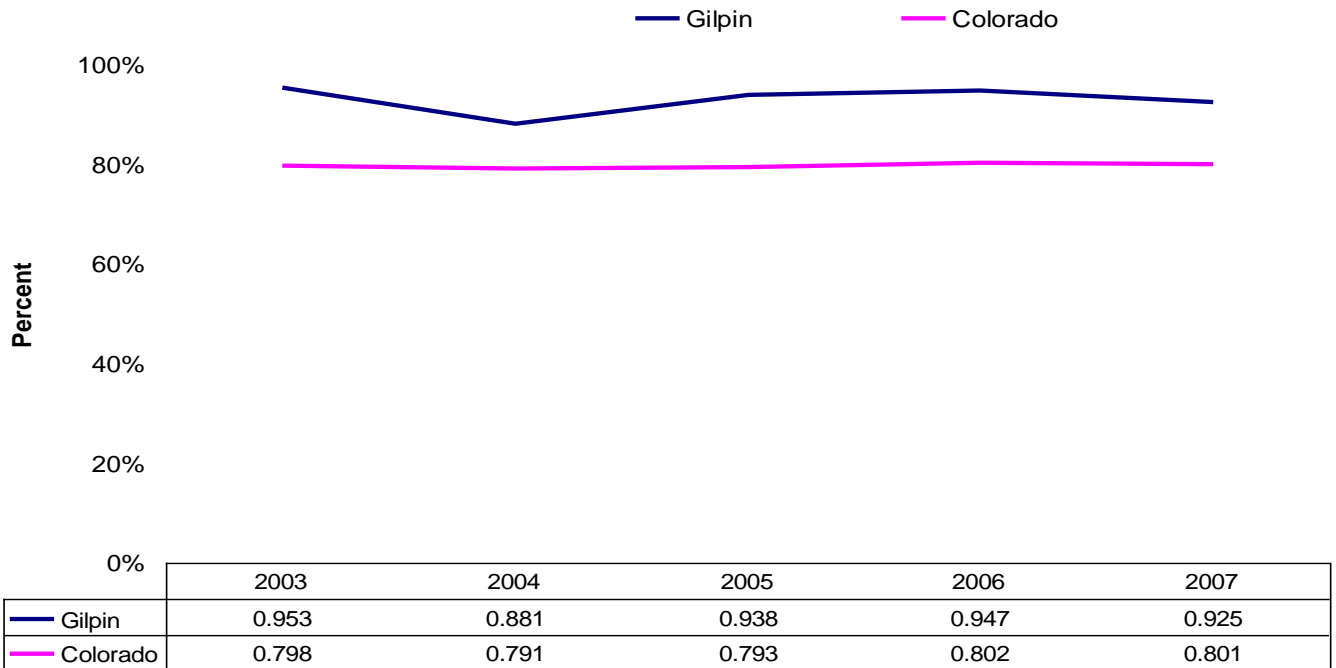
Unintended pregnancy has serious social and economic costs that can be measured by increased infant mortality and morbidity, reduced education attainment and employment opportunities, and increased healthcare expenses among other things. According to Pregnancy Risk Assessment Monitoring Survey (PRAMS) data, 38.7% of all live births in Gilpin County during 2000-2004 resulted from unintended pregnancies; the percent of live births to adolescent women that were unintended is reported as zero. Children's health status is affected by a variety of factors related to growth and development, and the early detection and treatment of health problems. Most infant deaths are due to four causes: birth defects, disorders related to short gestation and unspecified low birth weight (LBW), sudden infant death syndrome (SIDS), and respiratory distress syndrome.

### **Prenatal Care**

The use of timely, high quality prenatal care can help prevent poor birth outcomes. It is recommended that a woman start receiving prenatal care in the first three months (i.e. first trimester) of her pregnancy. Risk factors for late entry into prenatal care include, lack of culturally appropriate pregnancy testing sites, young age, and less than a high school education. In 2004, in the United States, 84% of mothers reported to have begun prenatal care within the first three months of pregnancy (Martin et. al, 2006).

Common reasons for women not starting prenatal care as early as needed are lack of money or insurance; lack of information about available programs to pregnant uninsured women; did not know they were pregnant; and could not get an appointment. Gilpin County specific data is not available for this indicator.

## Percentage of Mothers Receiving First Trimester Prenatal Care, Gilpin County, and Colorado, 2003-2007



Data Source: CDPHE Maternal and Child Health County Datasets

During 2003-2007, an average of 93% of mothers in Gilpin County began prenatal care during the first trimester of their pregnancy compared with 80% of pregnant women throughout Colorado. Gilpin County meets the *Healthy People 2010* objective of at least 90%.

### Infant Mortality

Infant mortality is an important indicator of the health status of a community. It gives us an idea about the health status of new mothers and their ability to access prenatal care. Infant mortality is the death of a child less than one year of age. The infant mortality rate is the number of deaths of children less than one year old per 1,000 live births. Since the early 1900s, the infant mortality rate has decreased dramatically in the United States. In 2004, the U.S. infant mortality rate was 6.8 infant deaths per 1,000 live births.

For the period 2004-2007, the infant mortality rate in Gilpin County is less than 3.0 infant deaths per 1,000 live births, lower than Colorado's. Gilpin County meets the *Healthy People 2010* objective of 4.5 or fewer infant deaths per 1,000 live births.

### Adequate Weight Gain

One in four Colorado women does not gain enough weight during pregnancy. Colorado women who gained an inadequate amount of weight were more than one and a half times as likely to have delivered a low birth weight infant compared to women who gained an adequate amount of weight. Inadequate weight gain is defined as a gain of less than the recommended number of pounds according to a woman's body mass index (BMI). A woman with a low BMI (< 19.8) should gain 28-40 pounds; a woman with a normal BMI (19.8-26.0) should gain 25-35 pounds, and a woman with a high BMI should gain 15-25 pounds.

Colorado has one of the highest low birth weight rates in the nation. In 2004, the state’s low birth weight rate was 9 percent, with over 6,000 babies born low birth weight. Inadequate weight gain during pregnancy was the largest contributor to the number of singleton low weight births (CDPHE, 2000).

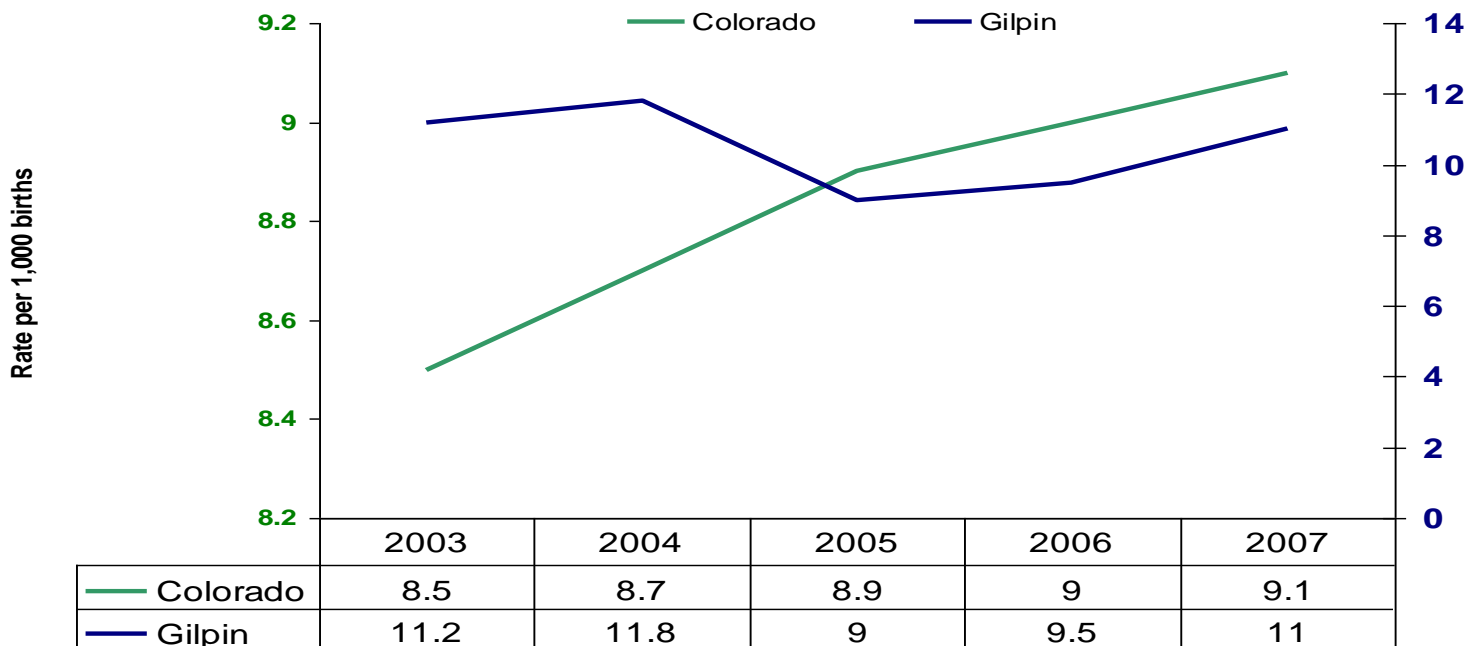
For the period 2002 – 2007, 24% of pregnant women in Gilpin County and in Colorado had inadequate weight gain during pregnancy. There is not a *Healthy People 2010* objective for this indicator, but the state of Colorado has set a 2010 goal of 18% or less of all pregnancies with inadequate weight gain.

### Low Birth Weight

Infants weighing less than 2,500 grams (5 lbs, 8 oz.) at birth are considered low birth weight (LBW). The weight of a newborn is an important predictor of future morbidity and mortality. For example, low birth weight is the most common cause of death during the first 28 days of life. For very low birth weight infants (<1,500 grams), the risk of dying in the first year of life is 100 times that of normal weight infants (National Center for Health Statistics, 2004). In addition, low birth weight infants who survive their first year are at increased risk of physical and developmental complications compared to normal birth weight infants.

Nationally, low birth weight rates have been increasing. In 2004, the nationwide percentage of low birth weight infants was the highest in three decades at 8.1 %. Between 2003 and 2007, 10.5% of Gilpin County births were low birth weight, or about an average of six births per year. During the period 2003-2007, Gilpin County's low birth weight rate was lower than Colorado's rate of 8.8. Since 2003, Gilpin County's low birth weight rate has been decreasing, unlike Colorado and national trends.

**Percentage of All Births that are Low Birth Weight (LBW), Gilpin County, and Colorado, 2003 - 2007**



Source: CDPHE Maternal and Child Health County Datasets



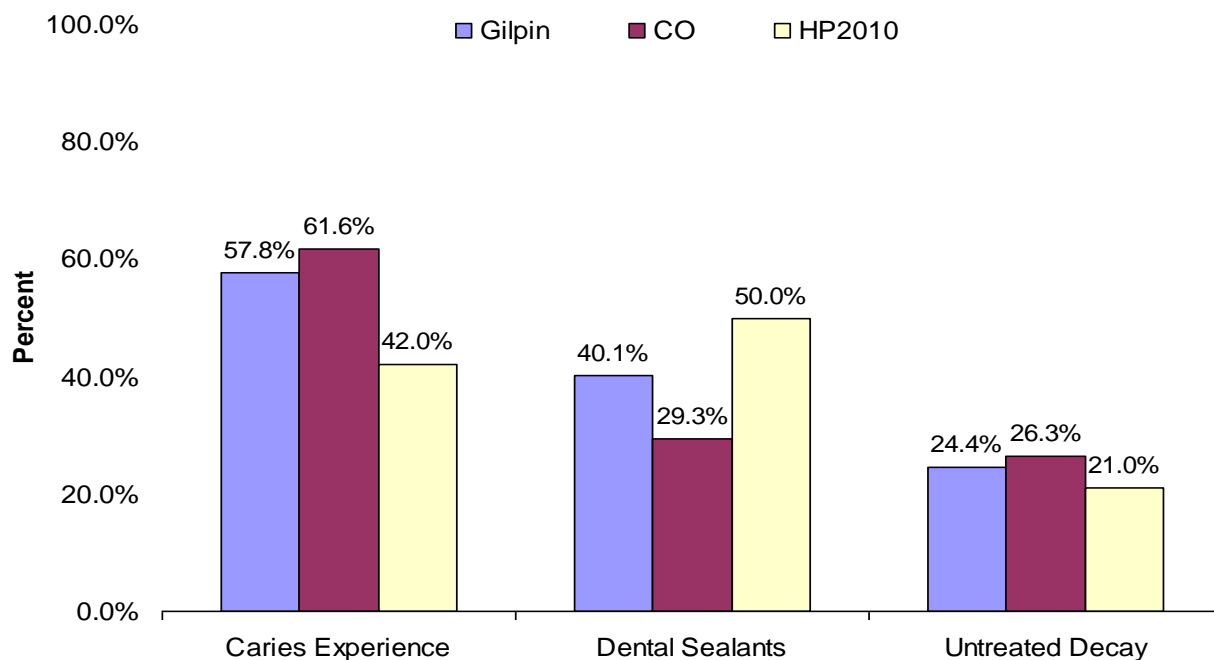
Data regarding sexual behaviors for Gilpin County high school students are not available. In 2003, 61% of Colorado high school students and 53% of students throughout the United States reported they never had sexual intercourse. There is not a *Healthy People 2010* objective for this measure, but the national baseline is at least 50% for this indicator. Among sexually active students, 63% of Colorado and U.S. high school students reported they used a condom during the last time they had intercourse.

## Dental Health

Dental caries, or tooth decay, is a pervasive public health problem affecting the quality of life for young children and others not able to care for themselves. Dental caries are the single most common chronic disease of childhood. It is more common than asthma and hay fever. Dental caries are almost entirely preventable through fluoridation, dental sealants, or other intervention strategies. Despite the reduction in the prevalence of untreated dental caries in recent years, more than 50% of children have caries by the second grade. It is estimated that 29% of children between the ages of 6 and 8 years have untreated dental decay.

A representative oral needs assessment of Colorado children was completed on a combined total over 4,000 kindergarten and third-grade children in 2004. Data from the 2004 Basic Screening Survey revealed that more than 46% of kindergarten and 57% of third grade Colorado children had experienced dental caries. In Gilpin County, 58% of third grade children had some experience with dental disease, either treated or untreated; 34% had untreated dental decay; and 40% had dental sealants, which is a protective measure to prevent tooth decay. Comparing these estimates with *Healthy People 2010* objectives, we see that Gilpin County has not met any of the targets yet.

### Oral Health of Gilpin and Colorado Third Graders and Healthy People National 2010 Objectives, 2004



Source: CDPHE Maternal and Child Health County Datasets

## Immunizations

Vaccines are one of the most significant public health achievements of the past century. Vaccinations are given to children to protect them from serious infectious diseases. Colorado requires children to be up-to-date on their shots before enrolling in licensed childcare facilities and kindergarten.

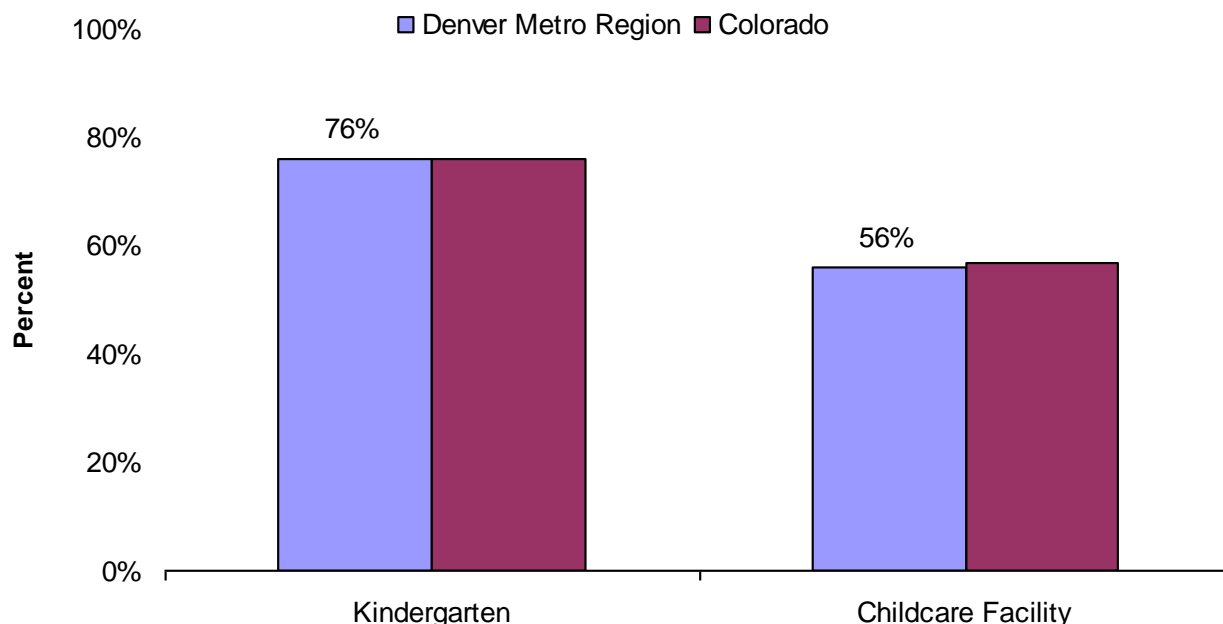
Pneumonia and influenza deaths together are one of the top ten leading causes of death in the United States and in Gilpin County. In the United States, influenza causes an average of 110,000 hospitalizations and 20,000 deaths annually; pneumococcal disease causes 10,000 to 14,000 deaths annually. Most deaths and serious illnesses from influenza and pneumonia are among older adults and other high-risk individuals. Vaccinating high percentages of adults aged 65 and older is feasible because vaccines for these diseases are more widely available and covered by nearly all health plan providers.

During the 2004-2005 school year, the Colorado Department of Public Health and Environment Immunization Program randomly sampled schools in Colorado to estimate the prevalence of childhood vaccinations of Colorado children. The data for immunizations in Gilpin County are included with eleven other counties in the Denver Metro region of Colorado. Immunization rates for the region (76% at kindergarten and 56% for children in childcare facilities) are similar to immunization rates for Colorado (76% at kindergarten and 57% in childcare facilities).

For children in childcare facilities, 58% of Latinos are up-to-date with immunization status, compared to 64% of non-Latino children. Immunization rates for boys (60%) and girls (52%) are similar, as are the rates of U.S.-born children (59%) compared with foreign-born children in childcare facilities (56%).

At kindergarten, 74% of the boys and 80% of the girls are up-to-date with their immunizations. The rates of Latino children (75%) and non-Latino children (83%) are somewhat different. By kindergarten age, more than three-fourths of U.S. and foreign-born children (79% and 77%, respectively) are up-to-date with their immunizations.

### Percentage of Children with Up-to-Date Immunizations in Kindergarten and Childcare Facilities, Denver Metro Region and Colorado, 2004 - 2005



Source: CDPHE Immunization Survey

The number of Gilpin County adults aged 64 and older who received a shot for influenza during the past 12 months is not known. In 2004-2005, Colorado's overall rate was 76%. The *Healthy People 2010* objective is at least 90%.

The number of Gilpin County adults aged 65 and older who received at least one pneumonia shot in the past is not known. In 2004-2005, Colorado's rate was 67%. The *Healthy People 2010* target is 90% or more.

## **Injury and Violence**

Injuries are one of the most under-recognized public health problems in the United States today. Unintentional injuries are often referred to as accidents and include injuries due to car crashes; fires; falls; drowning; poisonings; suffocation; bicycle crashes; and so on. Homicide is an intentionally inflicted fatal injury to another person. Suicide is a self-inflicted injury that is fatal. Injury data presented here include total unintentional injury deaths, motor vehicle injury deaths, homicide deaths, and suicide deaths. In Colorado, injuries are the third leading cause of death (Colorado Department of Public Health and Environment, 2006). Nationally and in Colorado, two-thirds of injury deaths are unintentional.

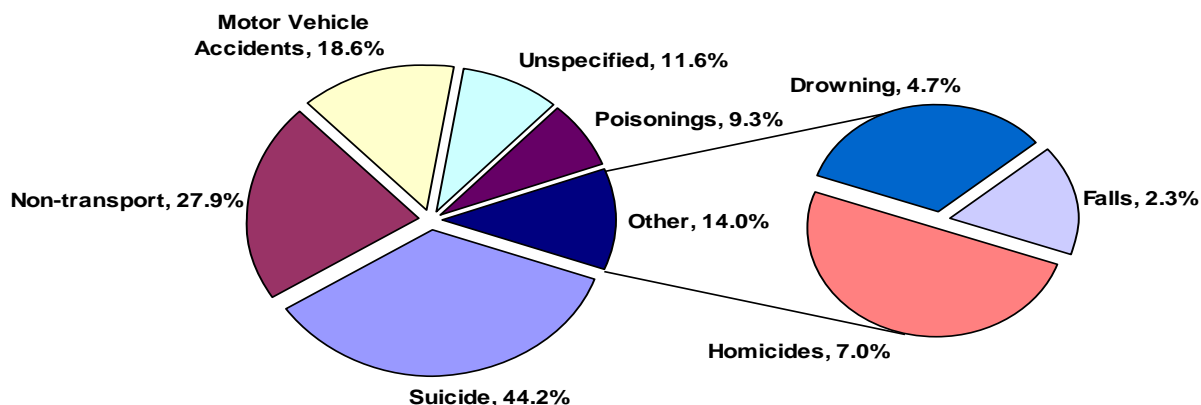
Suicides (19) accounted for 44% of all injury deaths (43) in Gilpin County during the ten-year period 1996-2006. Suicide is the eighth leading cause of death in Colorado with more individuals dying of suicide than are killed in motor vehicle crashes. Other injuries causing deaths were motor vehicle crashes (8 deaths; 19%), unspecified non-transportation related unintentional injuries (5 deaths; 12%), poisonings (4 deaths; 9%) and homicides (3 deaths; 7%). Other unintended injuries causing deaths were from drowning and falls.

### **Unintentional Injury and Hospitalization**

From 1996 to 2006, 20 people died from unintentional injuries in Gilpin County. The unintentional injury rate was 50.6 per 100,000, which is close to three times the *Healthy People 2010* objective target of  $\leq 17.5$  per 100,000. Gilpin County's rate was higher than the state of Colorado (41.1 per 100,000).

From 2002-2007, the rate for injury hospitalizations for children aged 0 to 19 in Gilpin County was 316 per 100,000. The rate for Colorado during the same time was 300 per 100,000. The rate of child abuse/maltreatment (including physical abuse, sexual abuse, emotional abuse, and/or neglect) of children younger than 18 between 2000 and 2007 in Gilpin County was 4.4 per 1,000 children. The rate in Colorado was 6.9 per 1,000. Rate trends for child abuse in Gilpin County are similar to those seen in the State.

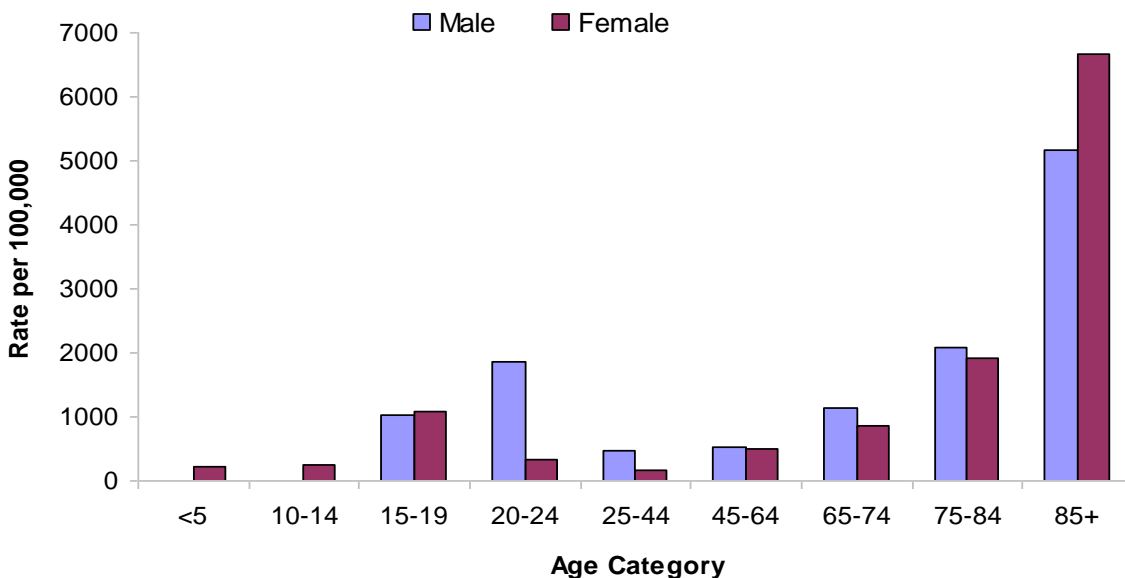
## Injury Deaths, Gilpin County, 1996-2006, Total = 43



Data Source: CDPHE Colorado Health Information Dataset

From 1995 to 2005, 219 hospitalizations for unintentional injury occurred in Gilpin County. The rate was 441.7 per 100,000 people, which was significantly lower than the rate for the state. The rate of unintentional injury increased dramatically after age 64. Prior to age 75, rates were generally higher among males, but after 75 female rates exceeded male rates. Unintentional injury hospitalizations rates were lowest for females aged 20 to 44 and for males aged 25 to 64.

## Unintentional Injury Hospitalization by Age and Gender, Gilpin County, 1996-2006



Data Source: CDPHE Colorado Health Information Dataset

## Suicide

On average, approximately 720 individuals die and 2,560 individuals are hospitalized for suicide/self-directed violence in Colorado each year. Suicide is the eighth leading cause of death in Colorado with more individuals dying of suicide than are killed in motor vehicle crashes. Suicide attempts are among the leading causes of injury hospitalizations for Coloradans ages 10-64.

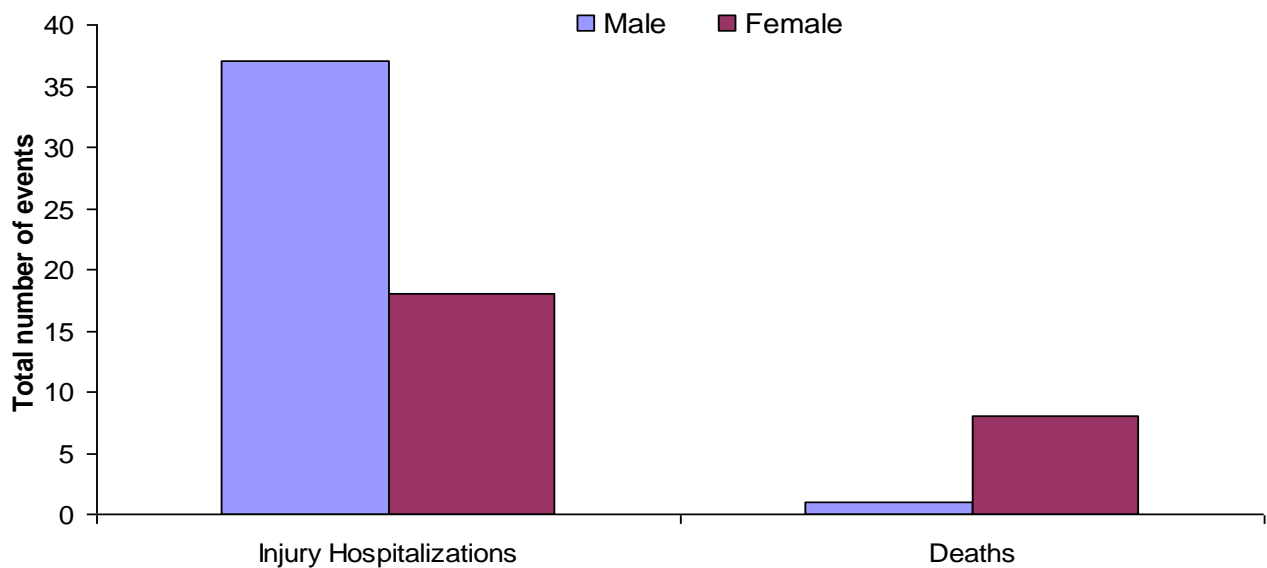
From 1996 to 2006, 19 people died from suicide in Gilpin County. The suicide rate was 35.8 per 100,000. Colorado's suicide rate was 15.8 during the same time. Gilpin County's rate was substantially higher than the state's. Gilpin County does not meet *Healthy People 2010* objective of 5.0 or fewer suicides per 100,000 people.

Between 1995 and 2005, 14 people were hospitalized for suicide attempts/self-inflicted injuries in Gilpin County for a rate of 32.3 per 100,000 people. Colorado's rate during the same time was 56.4. Gilpin County's rate was lower than that for the state of Colorado.

## Motor Vehicle Crashes

Every year more than 700 Colorado residents are killed and over 4,000 are hospitalized for injuries sustained in a motor vehicle traffic crash (Colorado Department of Public Health and Environment, 2006). From 1996 to 2006, 8 people died in motor vehicle crashes in Gilpin County. The mortality rate was 13.7 per 100,000, which is one and a half times the *Healthy People 2010* goal of less than or equal to 9.2 per 100,000. Gilpin County's rate was slightly lower than the State's. More males (37) than females (18) were hospitalized with injuries from motor vehicle crashes between 1995 and 2005 in Gilpin County. Of the eight motor vehicle crash related deaths during this time, seven were female.

**Motor Vehicle Crash Injury Hospitalizations and Deaths by Gender, Gilpin County, 1995-2006**



Data Source: CDPHE Colorado Health Information Dataset

## **Homicide**

From 1996 to 2006, four people died from homicide in Gilpin County. The homicide rate was 6.9 per 100,000. This is above the Colorado rate of 4.1 per 100,000. Gilpin County's rate exceeds the *Healthy People 2010* objective of 3.0 or fewer homicides per 100,000 people.

Between 1995 and 2005, the hospitalization rate for assaults/legal intervention associated injuries in Gilpin County was 24.2 per 100,000 (12 people in total). The rate in for Colorado during this time was 27.8. Gilpin County's rate was lower than Colorado's.

*Healthy People 2010* does not have any goals for the prevention of injury hospitalizations.

## **Healthy Environments**

It is well known that the environment people live in can affect their health. Many preventable illnesses worldwide can be attributed to poor environmental quality. Globally, the absence of proper sanitation and safe drinking water causes sickness, disability, death, and even conflict between and within countries.

Early public health interventions in the U.S. included the diversion of waste and protection of water sources, recognizing that polluted water and the lack of proper waste disposal spread disease. Today, most U.S. residents, because of the success of such early efforts, can count on, if not expect, ample availability of proper sanitation and potable drinking water and a substantially improved life afforded by the absence of related sickness and death.

Leading environmental quality issues include air pollution, sanitation, and access to safe drinking water. Sanitation and access to safe drinking water are more often concerns in re-developing countries; however, they cannot be ignored as issues in Gilpin County. As a point of comparison to Colorado and the U.S., air pollution indicators for Gilpin County will be considered in this section, as well.

### **Access to Proper Sanitation and Safe Drinking Water**

Sanitation is the hygienic means of preventing human contact from the hazards of wastes to promote health. Wastes that can cause health problems are human and animal feces, solid wastes, domestic wastewater (sewage, urine, and grey-water), and industrial and agricultural wastes. Hygienic means of prevention can be accomplished by using sewage and wastewater treatment plants, latrines, septic tanks, or even by simple hand washing with soap.

Approximately 4,300 people in Gilpin County (87%) live outside of the water and sanitation districts in Central City and Black Hawk and are, therefore, personally responsible for assuring access to proper sanitation and safe drinking water. Beginning in 1998, the County defined proper sanitation as septic systems. The County's certification of occupancy requires a working water supply. Three percent of houses in Gilpin County in 2000 lacked complete plumbing facilities compared to the state's rate of 0.4%.

In general, about 85% of city dwellers had access to proper sanitation at the end of 2000, while the rate for rural dwellers was 36%. About 94% of city dwellers and 71% of rural dwellers had access to safe water at the end of 2000.

## **Air Pollution**

Gilpin County is in an un-monitored air quality control region in the state of Colorado. There are no local regulations addressing air quality management. Consequently, the annual concentrations of ozone, carbon monoxide, particulates, lead and other types of outdoor air pollutants is unknown for Gilpin County.

Indoor air pollution can be evaluated by looking at the rate of cigarette smoking (refer to page 25, *Tobacco Use*) and the percentages of households using coal, wood, or kerosene as the main source of heating and cooking fuel. In 2000, 15.1% of households in Gilpin County used fuel oil, kerosene, and wood as the source of heating fuel, which is substantially more than the state's rate of 1.8%.

## **Infectious and Emerging Diseases**

Many diseases with a long public health history, like tuberculosis (TB) and sexually transmitted diseases have reappeared as important causes of illness or death. Recently, we have also been confronted with several newly emerging diseases like HIV/AIDS and West Nile virus. It is essential that communities be able to detect and respond to outbreaks of these diseases in order to prevent serious illness or death. Gilpin County reported no cases of tuberculosis, West Nile Virus, or syphilis during 1999-2007.

### **Gonorrhea and Chlamydia**

Gonorrhea and Chlamydia are sexually transmitted diseases that are reported to the Colorado Department of Public Health and Environment when diagnosed by a health care provider. Between 1999 and 2003, Gilpin County had a lower rate of gonorrhea (21.0 cases per 100,000 population) than Colorado (61.5 cases per 100,000 population).

Between 1999 and 2003, 13 cases of Chlamydia were reported in Gilpin County. This case count corresponded to an approximate rate of 50 cases per 100,000-population and was lower than the state's rate of 281.3 per 100,000. The majority of Gilpin County cases (92%) were reported in women as was true for Colorado (75.6%).

### **HIV/AIDS**

As of June 30, 2007, there were 15 persons diagnosed with HIV or AIDS living in Gilpin County. The number of people living with AIDS in Colorado has increased steadily since 1990, while the number of new cases and the number of deaths from AIDS in Colorado have remained steady since 1998.

### **Hepatitis C**

Hepatitis C is the most common chronic blood-borne infection in the United States, with an estimated 2.7 to 4.0 million persons infected with the virus. Acute hepatitis C, which is the first stage of hepatitis C infection, can last up to 6 months. A large percentage of persons infected with hepatitis C, 75-85%, develop chronic infection, which, for some, results in liver disease and death. In Colorado, in 2003, 6,005 cases of Hepatitis C were reported; 17 of those cases were acute. In 2001-2006, Gilpin County reported no acute cases and 27 chronic cases of Hepatitis C.

### **Vaccine-Preventable Diseases**

Since the introduction of vaccines, rates of diseases such as polio, measles, mumps, rubella, diphtheria, pertussis (whooping cough), and meningitis (*haemophilus influenzae* type b) have declined by 95 to 100%. Immunizations prevent sickness, disability, and death.

Whooping cough is increasing nationally, in Colorado, and in Gilpin County. In 2004, Colorado had the fifth highest rate of whooping cough in the nation. During 2001-2006, a steady increase of pertussis occurred, totaling 14 cases.

In Gilpin County during 2001-2006, 29 other vaccine-preventable diseases were reported. They included flu, Hepatitis A, meningococcal disease, chicken pox, and invasive pneumococcal disease.